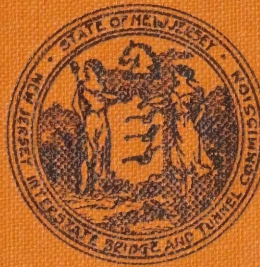


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Y: 5A
pt. 2

NEW YORK STATE BRIDGE AND TUNNEL COMMISSION

AND

NEW JERSEY INTERSTATE BRIDGE AND TUNNEL COMMISSION



HUDSON RIVER VEHICULAR TUNNEL

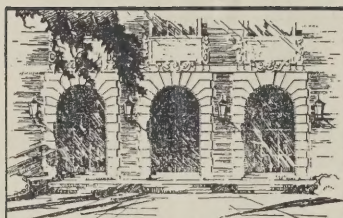
CONTRACT No. 5-A

OPEN APPROACHES BETWEEN DOMINICK STREET AND
BROOME STREET AND ON CANAL STREET BETWEEN
HUDSON STREET AND VARICK STREET

NEW YORK

CONTRACT DRAWINGS 1 to 17

1924



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Ans.

NEW YORK STATE BRIDGE AND TUNNEL COMMISSION

AND

NEW JERSEY INTERSTATE BRIDGE AND TUNNEL COMMISSION



HUDSON RIVER VEHICULAR TUNNEL

CONTRACT No. 5-A

OPEN APPROACHES BETWEEN DOMINICK STREET AND
BROOME STREET AND ON CANAL STREET BETWEEN
HUDSON STREET AND VARICK STREET

NEW YORK

CONTRACT DRAWINGS 1 to 17

1924

62513
N484h
v. 5A
pt. 2

2/16 April 49. TALMADGE

NEW YORK STATE BRIDGE AND TUNNEL COMMISSION

AND

NEW JERSEY INTERSTATE BRIDGE AND TUNNEL COMMISSION

NEW YORK STATE BRIDGE AND TUNNEL COMMISSION

GEORGE R. DYER, Chairman

E. W. BLOOMINGDALE, Vice-Chairman

MCDUGALL HAWKES

A. J. SHAMBERG

WILLIAM W. MILLS

Commissioner of Plant and Structures of New
York City

DWIGHT B. LA DU

State Engineer and Surveyor

PAUL WINDELS, Counsel

MORRIS M. FROHLICH, Secretary

NEW JERSEY INTERSTATE BRIDGE AND TUNNEL COMMISSION

THEODORE BOETTGER, Chairman

JOHN B. KATES, Vice-Chairman

THOMAS J. S. BARLOW

JOHN F. BOYLE

ISAAC FERRIS

WELLER H. NOYES

ROBERT S. SINCLAIR

FRANK L. SUPLEE

ROBERT CAREY, Counsel

JOHN C. MCENROE, Secretary

CLIFFORD M. HOLLAND

Chief Engineer

25 mch 49 g. A.C. Wicland

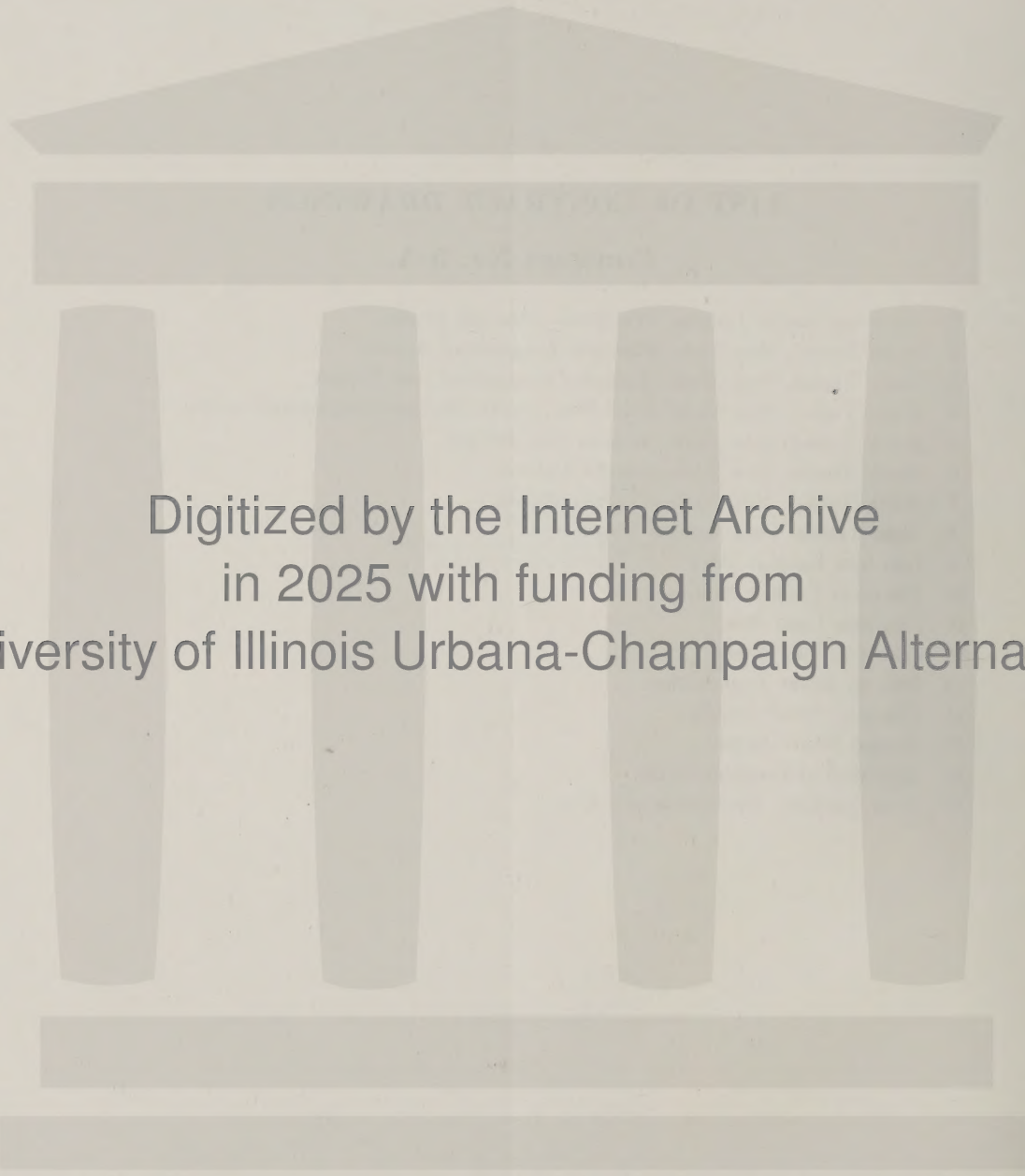


M. B. Brown Printing & Binding Co.,
37-41 Chambers Street, N. Y.

LIST OF CONTRACT DRAWINGS

Contract No. 5-A

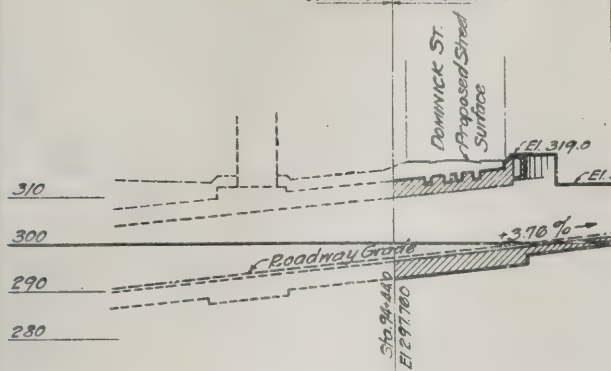
1. North and South Tunnels, New York—Plan and Profile.
2. South Tunnel, New York—Plan and Longitudinal Section.
3. South Tunnel, New York—Typical Cross-sections and Details.
4. North Tunnel, New York—Roof Plan, Invert Plan and Longitudinal Section.
5. North Tunnel, New York—Sections AA and BB.
6. North Tunnel, New York—Interior Details.
7. North Tunnel, New York—Concrete Details.
8. High Tension Duct Splicing Chamber.
9. Cast-iron Exhaust Port.
10. Electrical Conduit System.
11. Cast-iron Light Box.
12. Cast-iron Pull Boxes.
13. Plan of Sewer Construction.
14. Cast-iron Sewer Details.
15. Typical Sewer Details.
16. Regrading of Dominick Street.
17. Area Available for Contractor's Use.



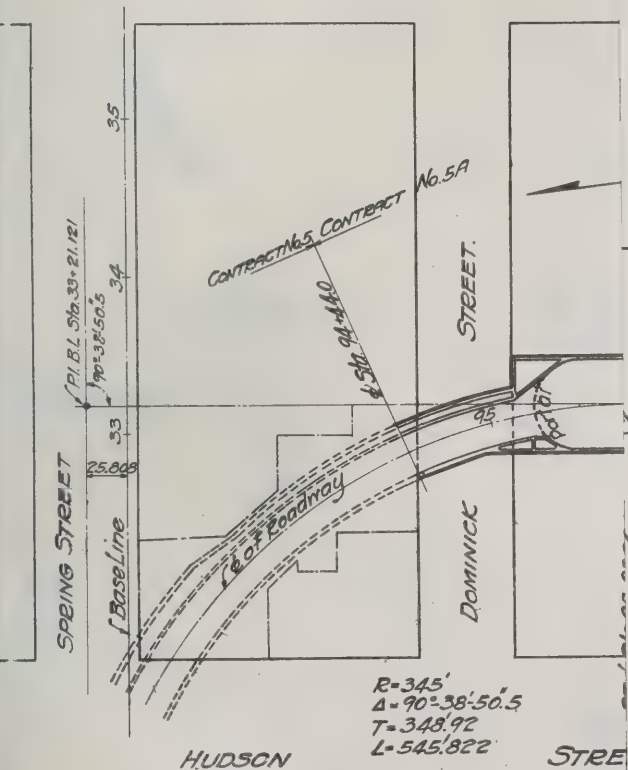
Digitized by the Internet Archive
in 2025 with funding from
University of Illinois Urbana-Champaign Alternates

<https://archive.org/details/hudsonrivervehic52unse>

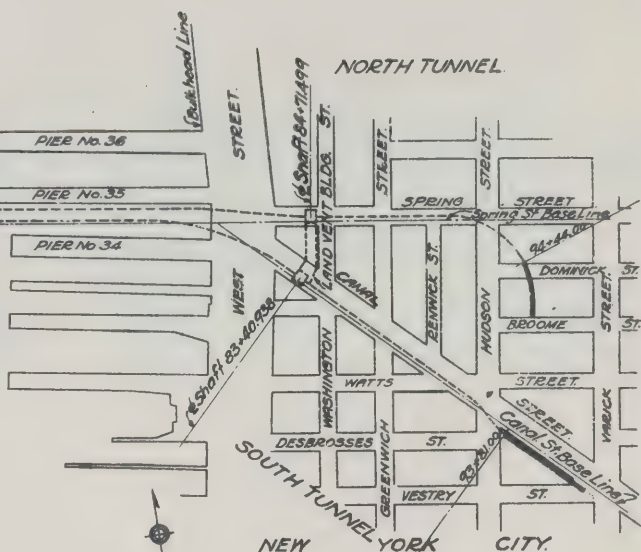
CONT No. 5. CONT No. 5A



**PROFILE
NORTH TUNNEL.**



**PLAN
NORTH TUNNEL**



KEY PLAN.

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 5A
CONTRACT DRAWING No. 1

SCALES: HOR. 0 10 20 30 40 FEET
VERT. 0 10 20 FEET

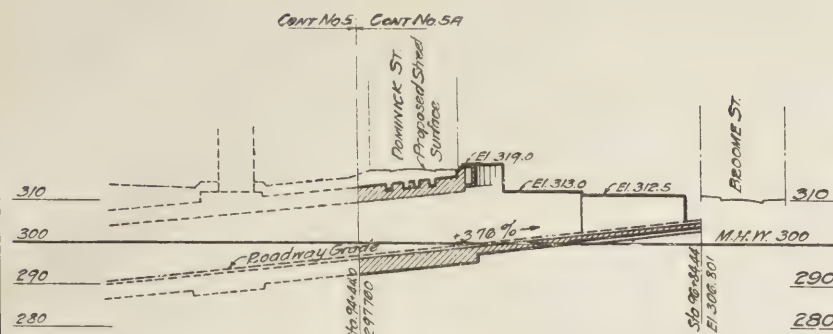
DATE: SEPTEMBER 6, 1924

Ol. Ingstad
ENGINEER OF DESIGNS.

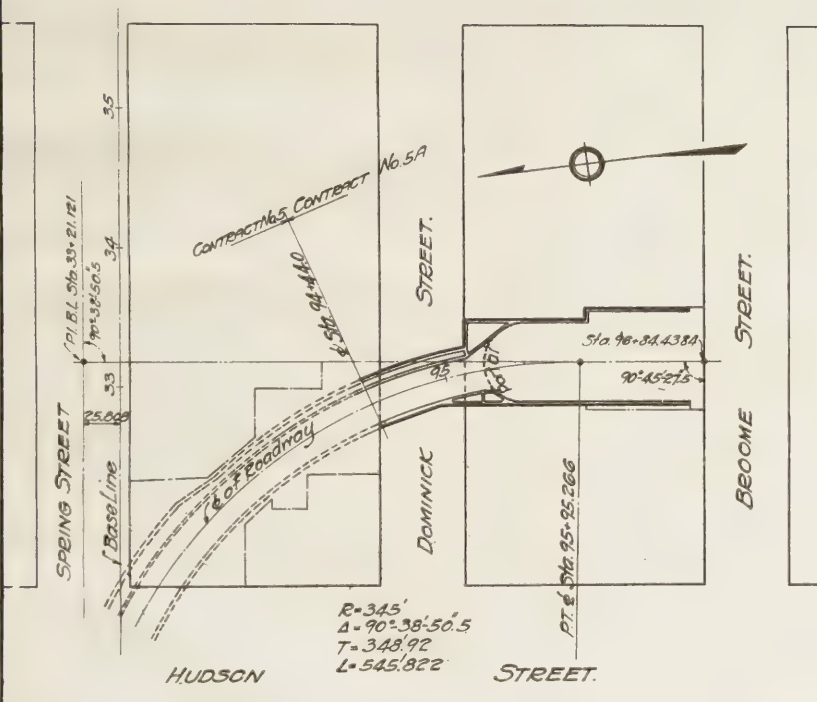
DRAWN BY *M. J. ...*
CHECKED BY *M. B. ...*

Clld ...
CHIEF ENGINEER

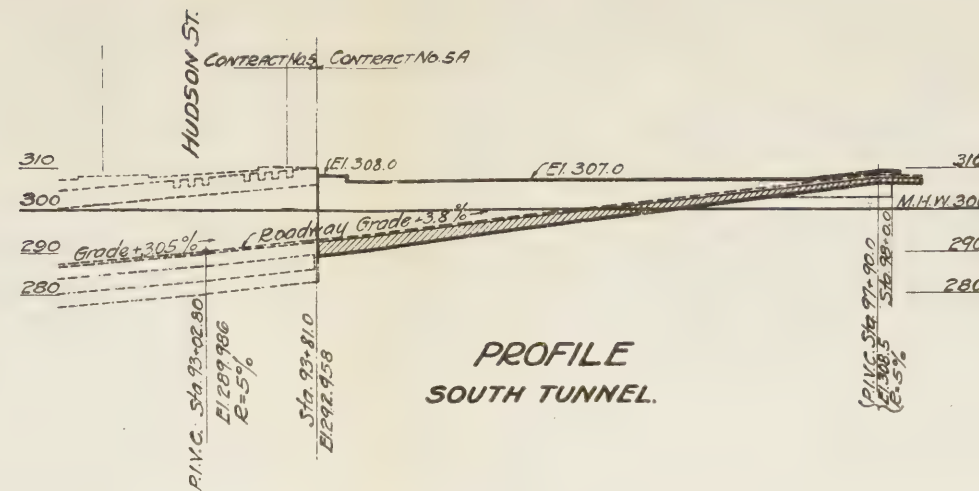
FILE NO. F-5A



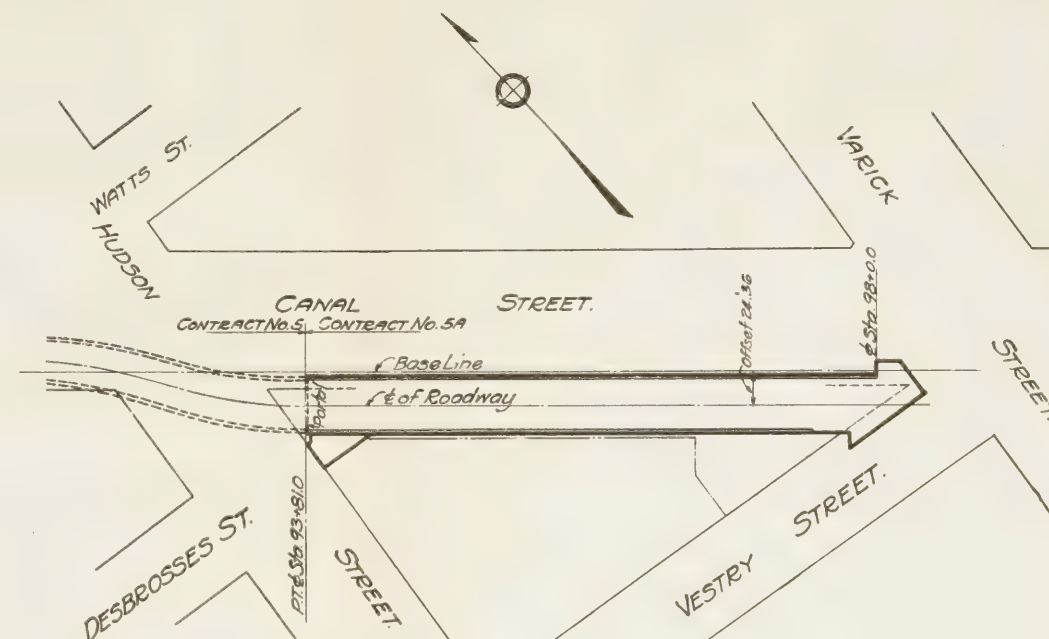
PROFILE
NORTH TUNNEL.



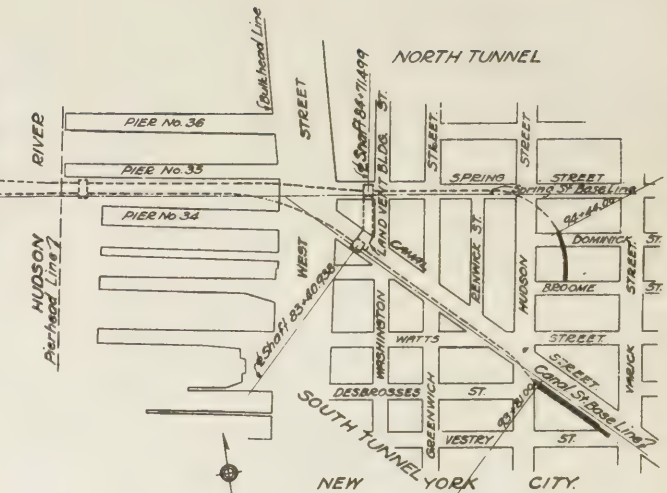
PLAN
NORTH TUNNEL



PROFILE
SOUTH TUNNEL.



PLAN
SOUTH TUNNEL.



KEY PLAN.

For Plan and Sections of South Tunnel	see Drwg. Nos. 2-3	File No. 1-5A
For Plan and Sections of North Tunnel	" " " 4-5	" " 1-5A
For Interior Details	" " " 6	" " 1-5A
For Concrete Details	" " " 7	" " 1-5A
For High Tension Ducts Splicing Chamber	" " " 8	" " 1-5A
For Exhaust Port Casting	" " " 9	" " 1-5A
For Electrical Conduit System	" " " 10-12	" " 1-5A
For Sewer Construction	" " " 13-15	" " 1-5A
For Regrading of Dominick St.	" " " 16	" " 1-5A
For Area available for Contractor's Use	" " " 17	" " 1-5A

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION
HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 5A
CONTRACT DRAWING No. 1

SCALE: HOR 1" = 100' VERT 1" = 10' DATE: SEPTEMBER 5, 1924

DRAWN BY M. J. S. CHECKED BY M. J. S. CHIEF ENGINEER

FILE NO. 1-5A

Olden & Sons
ENGINEERS & DESIGNERS

VARICK

Canal St.

For Alinement and Profile:..... see Dwg. No. 1 File No. 1-5A
 For Sections..... " " " 3 " " 1-5A
 For Electrical Conduit System " Dwg. " 10-12 " " 1-5A

ST.

STREET

ST.

VESTRY

Curb

Building Line

NEW YORK STATE
 BRIDGE & TUNNEL COMMISSION
 AND
 NEW JERSEY INTERSTATE
 BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL
 CONTRACT No. 5A
 CONTRACT DRAWING No. 2

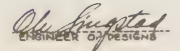
SCALE: 0 5 10 FT.

DATE: SEPTEMBER 8, 1924.

Chas. H. Hall
 CHIEF ENGINEER

DRAWN BY *A.R.D.*
 CHECKED BY *M.B. Law*

FILE NO. 1-5A



SCALE:  FT. DATE: SEPTEMBER 3, 1964.

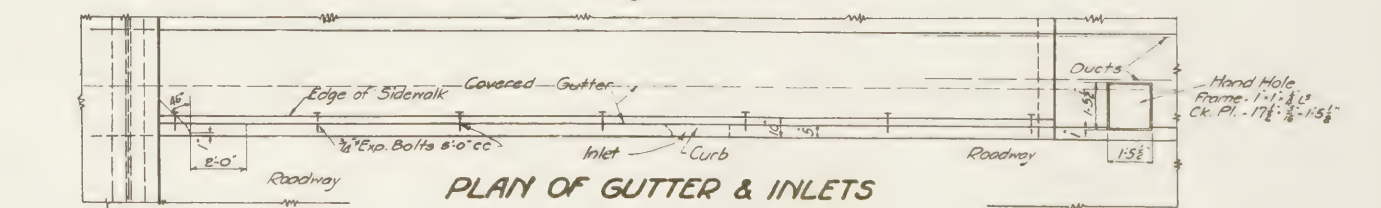
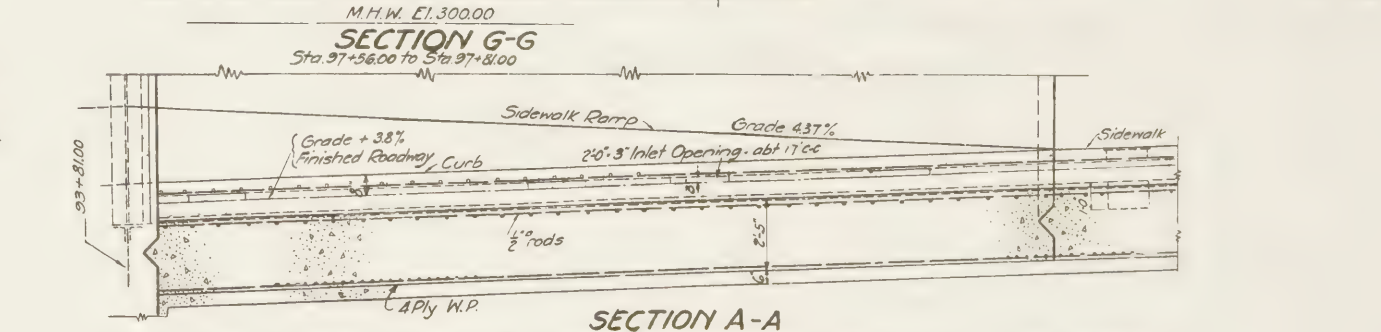
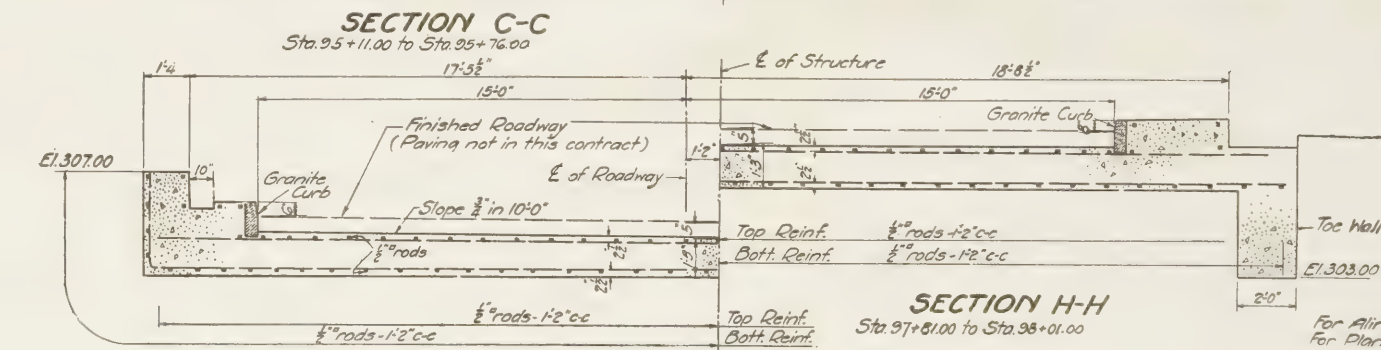
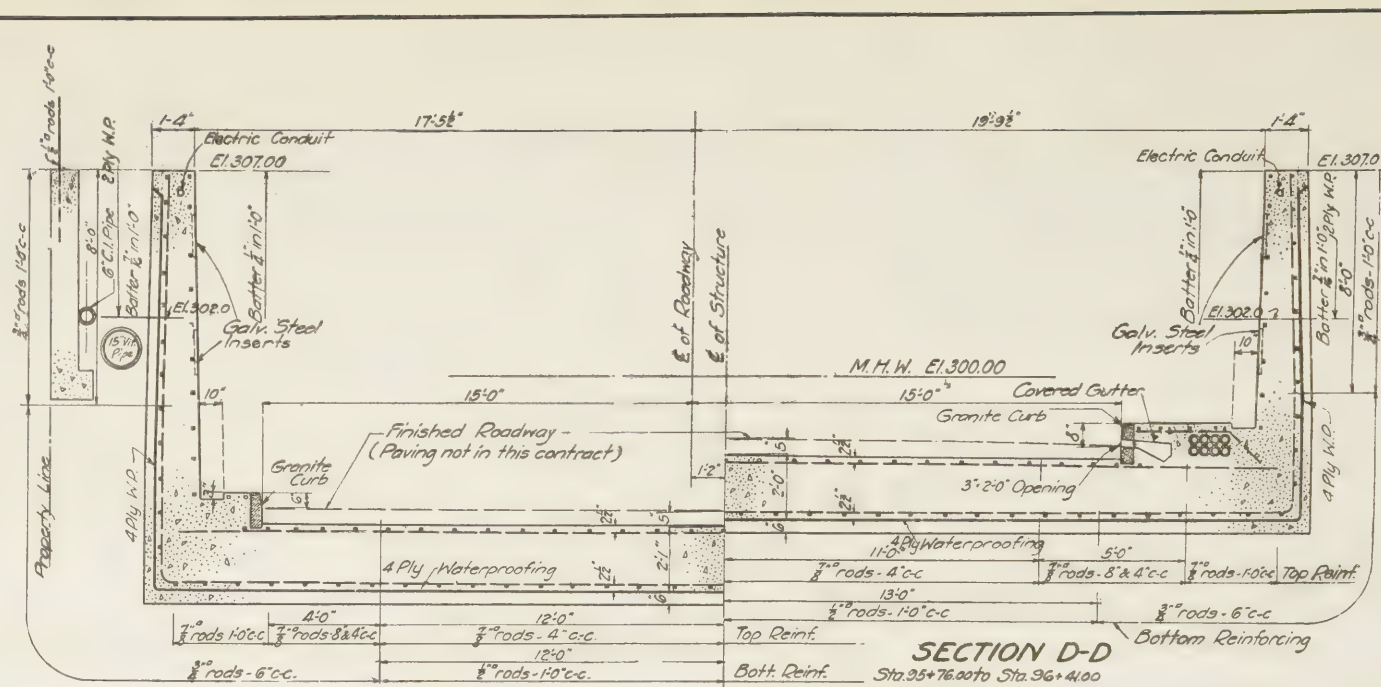
Cliff Holland

CHIEF ENGINEER

DRAWN BY *L.R.J.*
CHECKED BY *M.B. Law.*

FILE NO. 1-5A

M. B. BROWN PRINTING & BINDING CO., N. Y



SCALE:  FEET

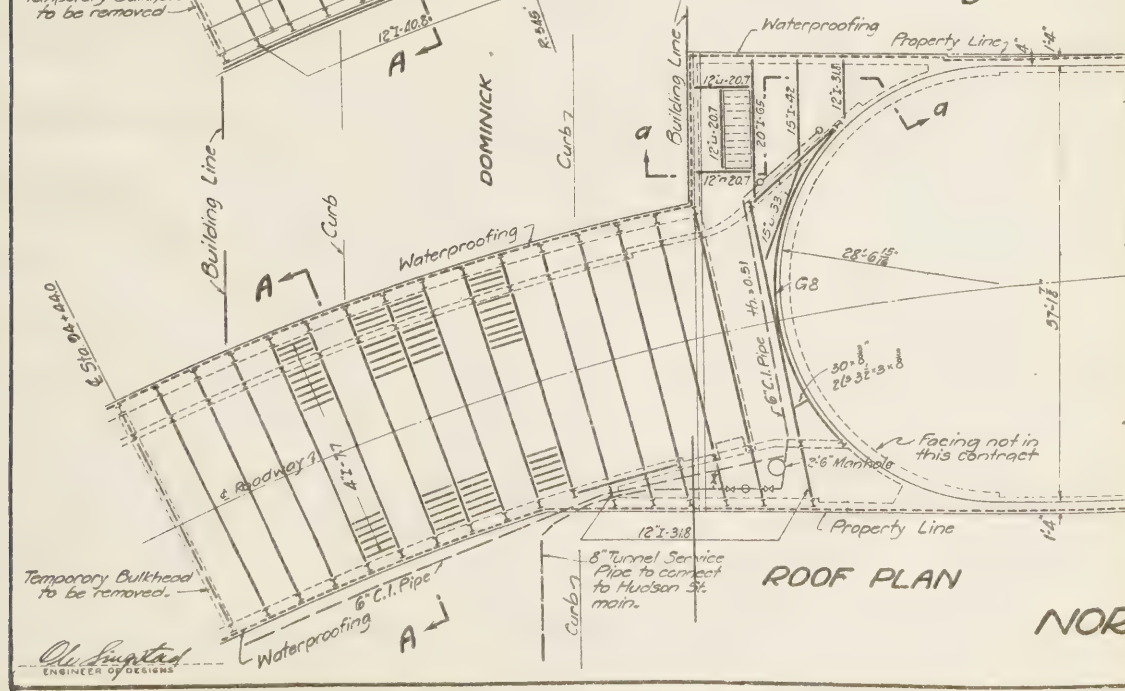
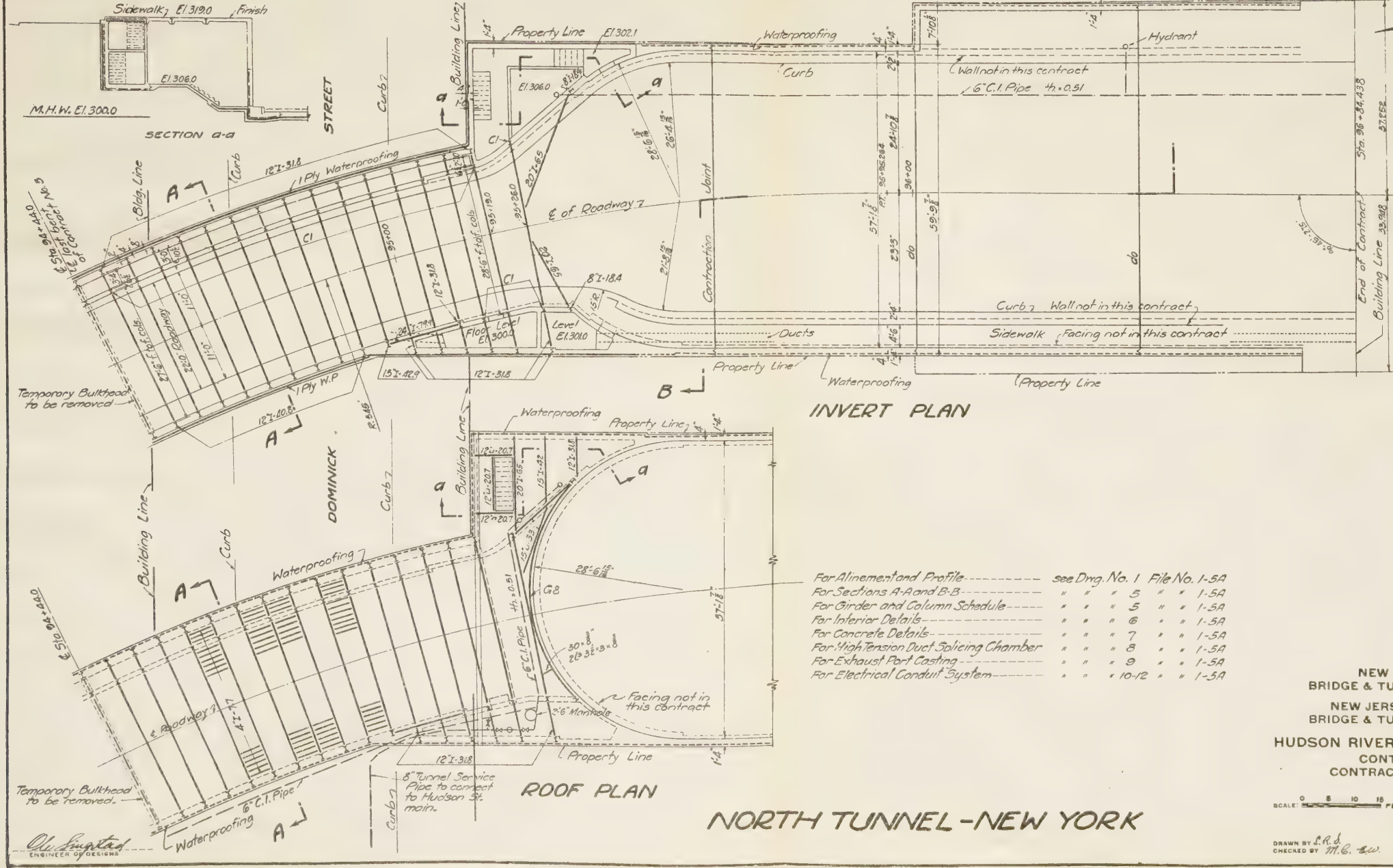
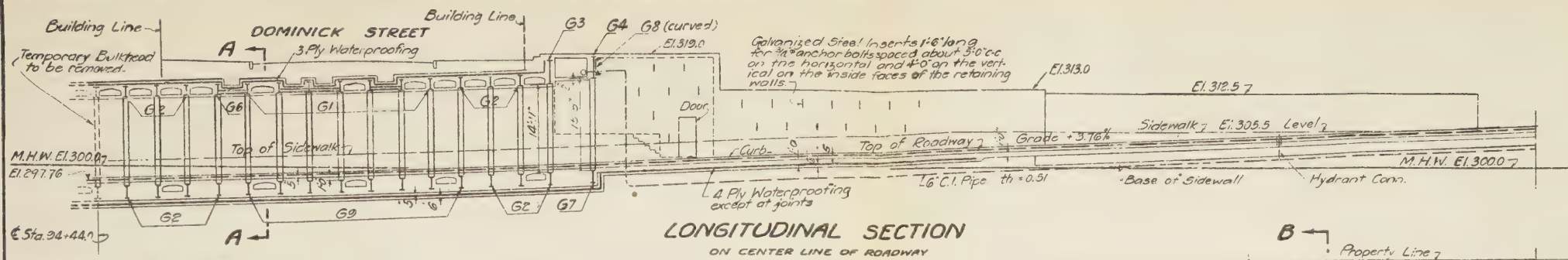
DATE: SEPTEMBER 8, 1954

Chas. W. [Signature]
CHIEF ENGINEER

DRAWN BY: L.R.D.
CHECKED BY: *M.B. [Signature]*

FILE NO. 1-5A

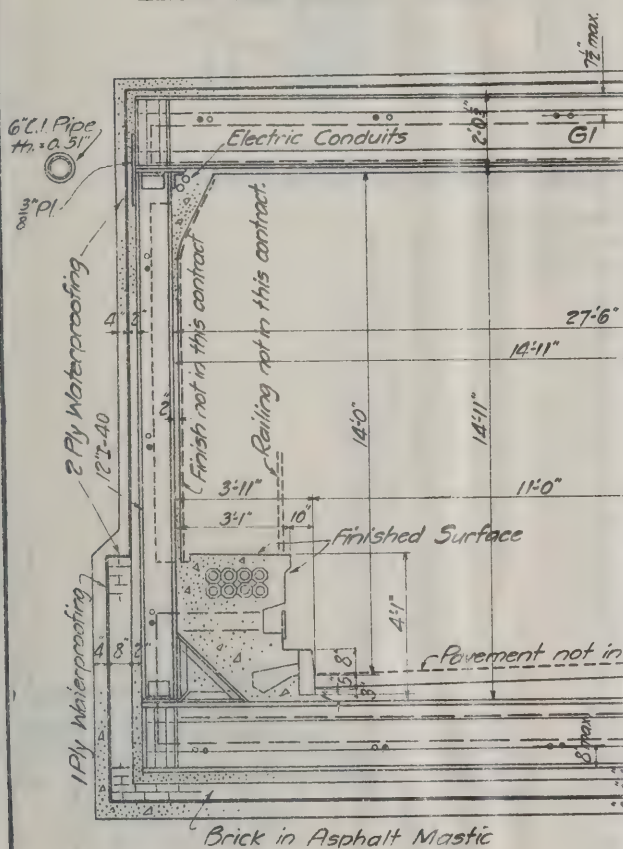
M. C. BROWN PRINTING & BINDING CO., N. Y.



For Alignment and Profile	see Dwg. No. 1	File No. 1-5A
For Sections A-A and B-B	" " " 5	" " 1-5A
For Girder and Column Schedule	" " " 5	" " 1-5A
For Interior Details	" " " 6	" " 1-5A
For Concrete Details	" " " 7	" " 1-5A
For High Tension Duct Splicing Chamber	" " " 8	" " 1-5A
For Exhaust Port Casting	" " " 9	" " 1-5A
For Electrical Conduit System	" " " 10-12	" " 1-5A

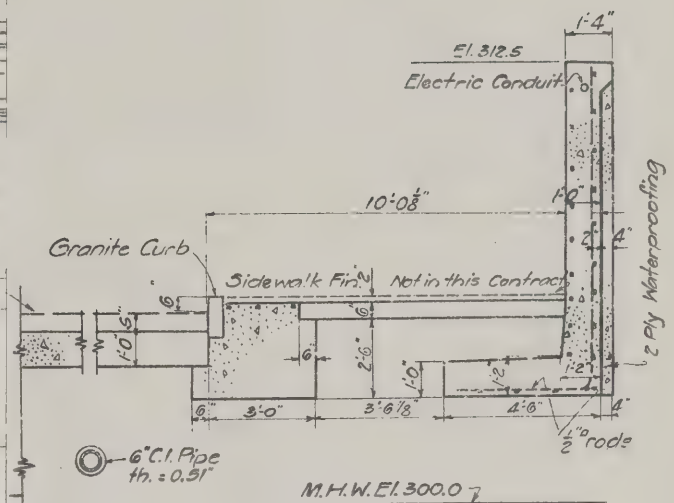
NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION
HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 5A
CONTRACT DRAWING No. 4

SCALE: 0 5 10 15 FEET
DATE: SEPTEMBER 6, 1924
DRAWN BY J.R.D.
CHECKED BY M.B. Bw.
CHIEF ENGINEER
FILE NO. 1-5A



ON B-B

SE



GIRDER SCHEDULE

MARK	WEB	4'S	COVER PLATES
G1	24x $\frac{1}{2}$	8x6x $\frac{3}{8}$	
G2	24x $\frac{3}{8}$	6x6x $\frac{3}{8}$	
G3	42x $\frac{3}{8}$	6x6x $\frac{9}{16}$	
G4	42x $\frac{3}{8}$	8x6x $\frac{3}{4}$	
G5	24x $\frac{7}{16}$	6x6x $\frac{1}{16}$	
G6	24x $\frac{3}{8}$	6x6x $\frac{1}{16}$	
G7	24x $\frac{9}{16}$	8x6x $\frac{1}{2}$	
G8	30x $\frac{3}{8}$	2x35x32x $\frac{3}{8}$	1-12x $\frac{3}{8}$ Curved
G9	24x $\frac{3}{8}$	6x6x $\frac{1}{16}$	
G10	24x $\frac{3}{8}$	32x3x $\frac{3}{8}$	

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 5A
CONTRACT DRAWING No. 5

SCALE: 0 1 2 3 FEET

DATE: SEPTEMBER 8, 1924

Ol. Ingstad
ENGINEER OF DESIGN

DRAWN BY L.R. J.
CHECKED BY M.B. -ew.

Ch. Halland
CHIEF ENGINEER

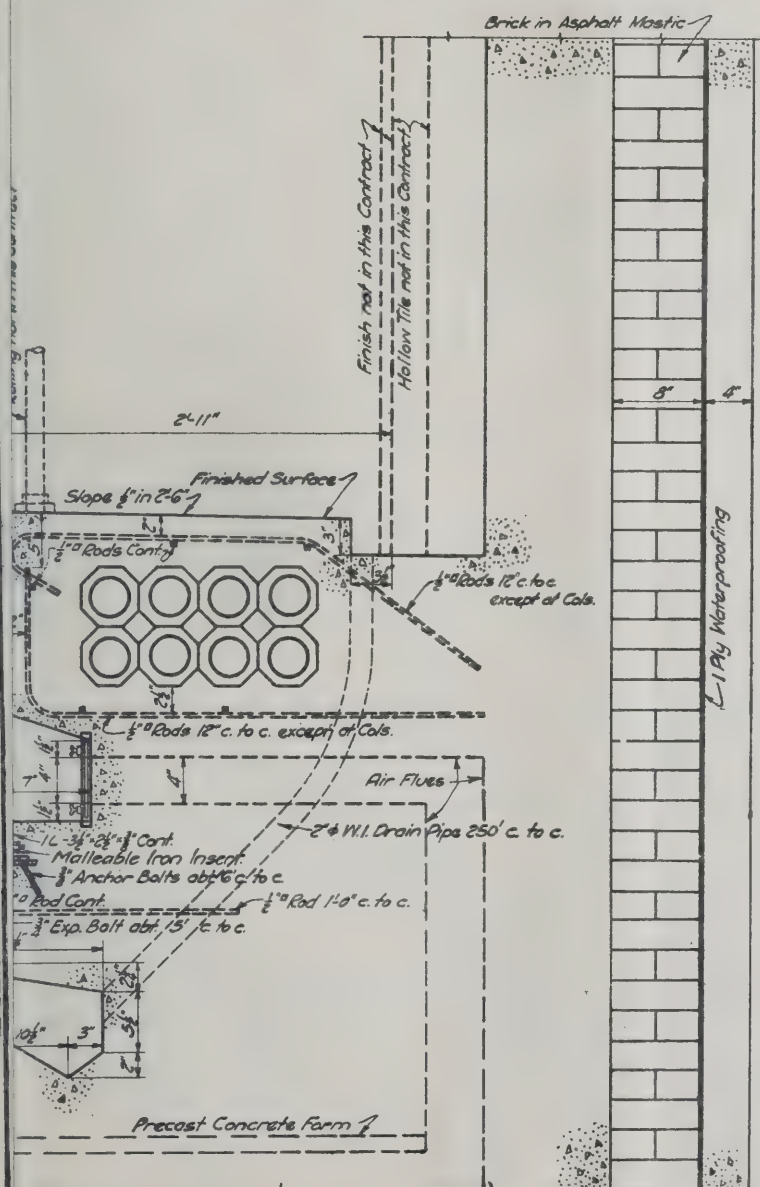
FILE NO. I-5A

CROSS SECTION AT GUTTER INLET

CROSS SECTION AT STEP NICHES

CURB DRESSING

For Alinement and Profile see Dwg. No. 1 File No. 1-5A
For Plan and Sections..... " Dwg. " 4-5 " " 1-5A
For Concrete Details..... " Dwg. " 7 " " 1-5A



ION AT SIDEWALK

**NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION**

HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 5A
CONTRACT DRAWING No. 6

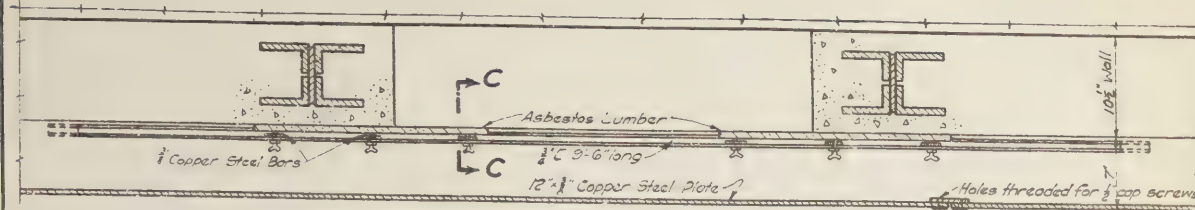
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DATE: SEPTEMBER 8, 1924

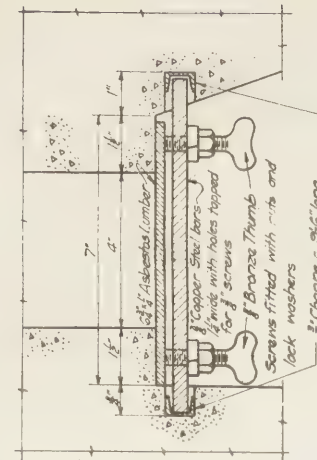
DRAWN BY *LNB*
CHECKED BY *FL*

Ch. Halland
CHIEF ENGINEER

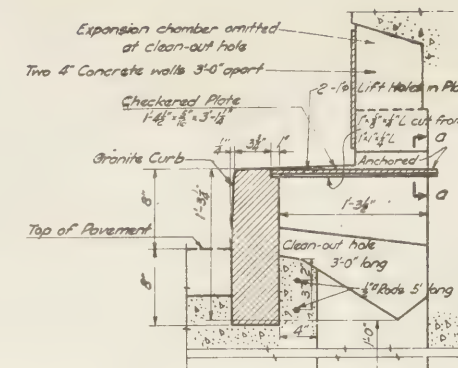
FILE NO. 1-5A



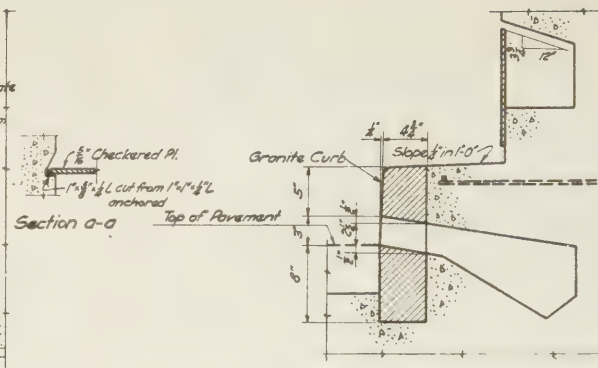
SECTION B-B



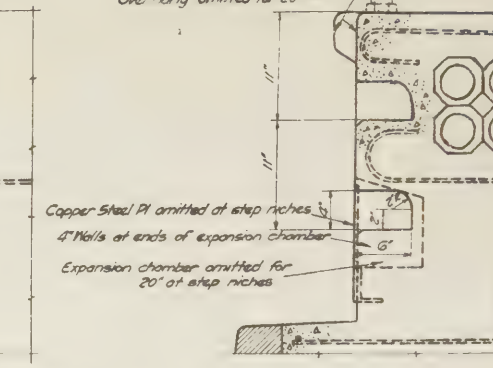
SECTION C-C



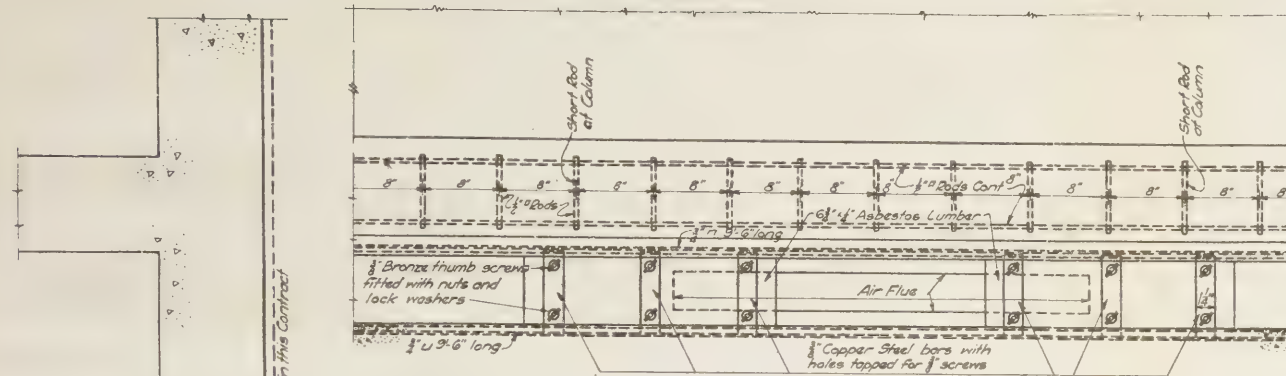
CROSS SECTION AT CLEAN-OUT HOLE



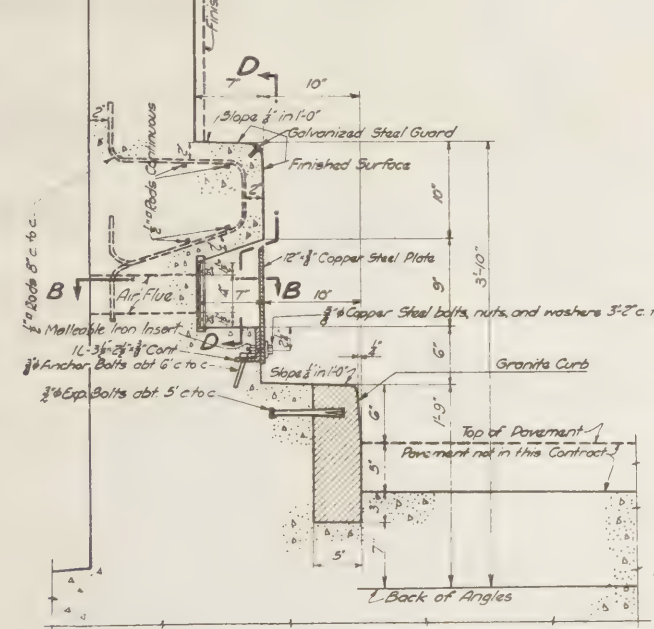
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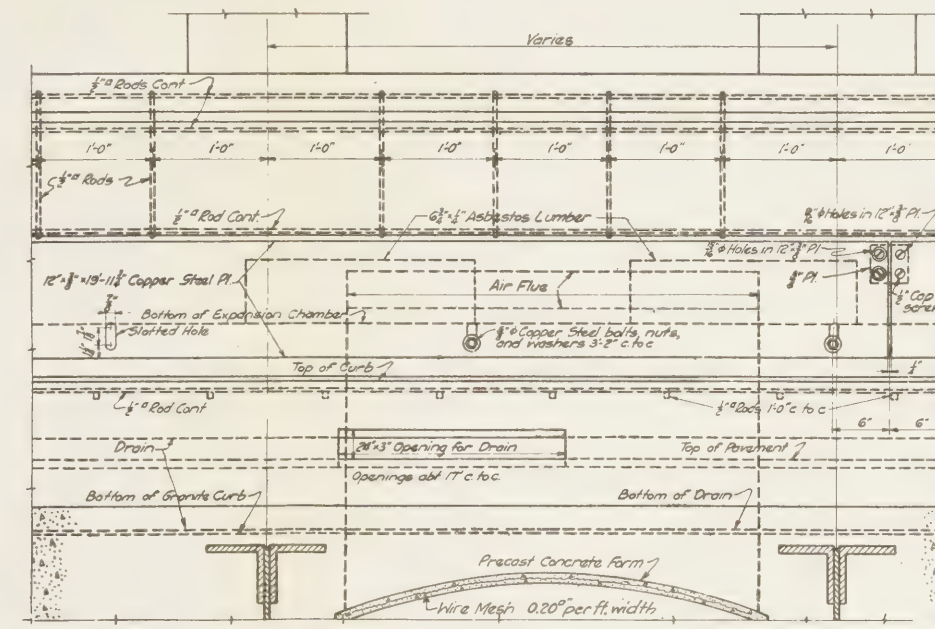
CROSS SECTION AT STEP NICHES



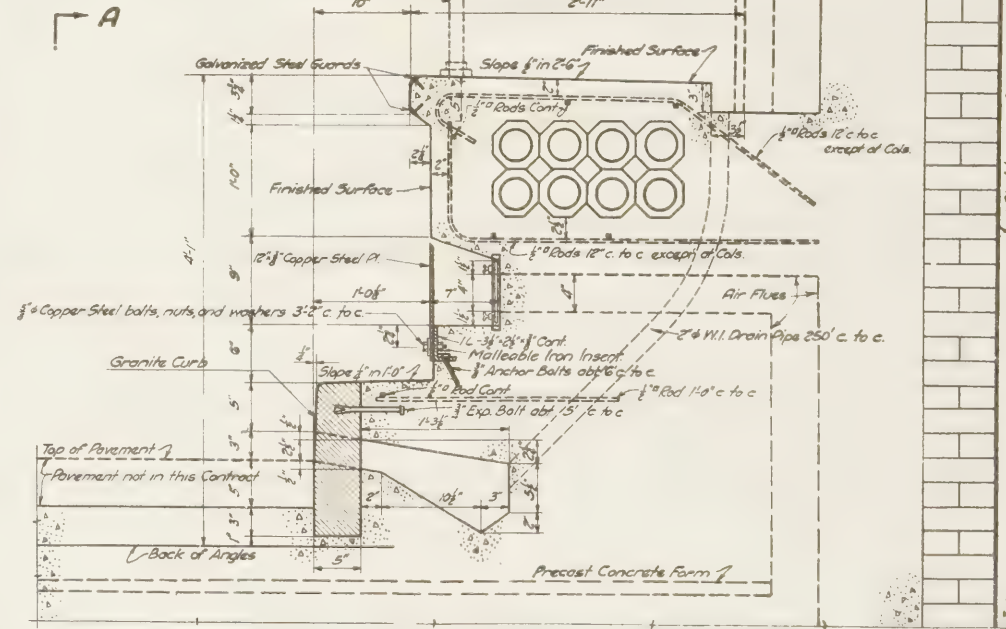
SECTION D-D



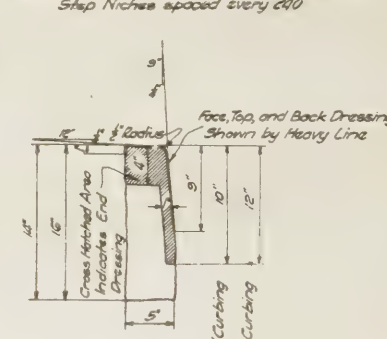
CROSS SECTION AT SIDE OPPOSITE SIDEWALK



SECTION A-A



CROSS SECTION AT SIDEWALK



CURB DRESSING

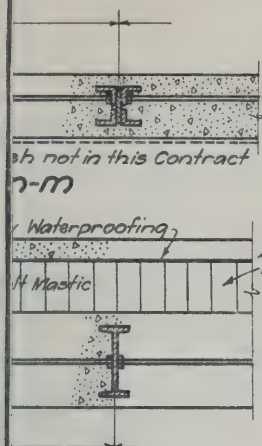
For Alignment and Profile see Dwg. No. 1 File No. 1-5A
For Plan and Sections..... " Dwg. - 4-5 - 1-5A
For Concrete Details..... " Dwg. - 7 - 1-5A

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION
HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 5A
CONTRACT DRAWING No. 6

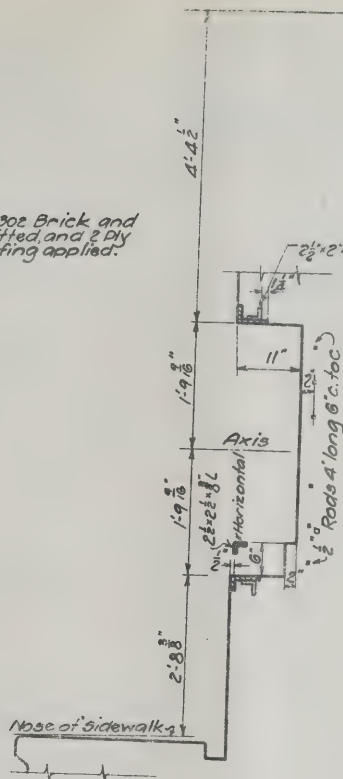
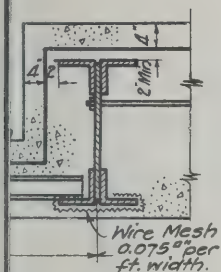
SCALE: 1" = 5'-0" INCHES
DATE: SEPTEMBER 8, 1924
DRAWN BY: L.B.G.
CHECKED BY: E.W.
CHIEF ENGINEER
FILE NO. 1-5A

M. B. BROWN PRINTING & BINDING CO., N. Y.

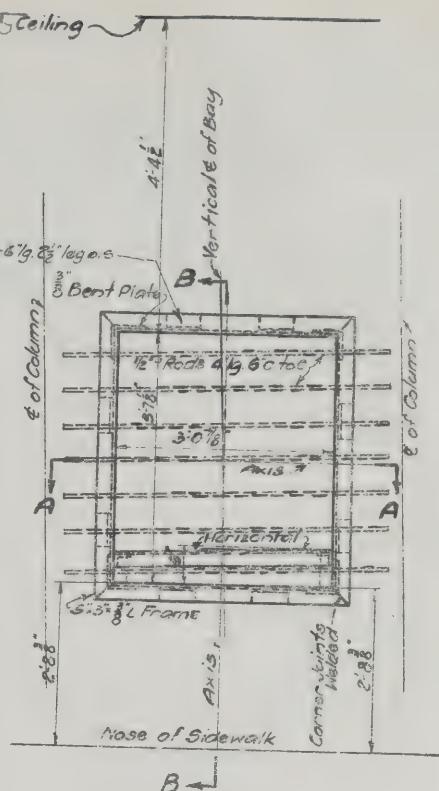
INTERIOR DETAILS



Above Elev. 302 Brick and Mastic omitted and 2 Ply Waterproofing applied.



SECTION B-B



SECTION A-A

FIRE EXTINGUISHER NICHE

and Profile see Dwg. No. 1 File No. 1-5A
 sections " " 4-5 " 1-5A
 tails " " 6 " 1-5A

NEW YORK STATE
 BRIDGE & TUNNEL COMMISSION
 AND
 NEW JERSEY INTERSTATE
 BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL
 CONTRACT No. 5 A
 CONTRACT DRAWING No. 7

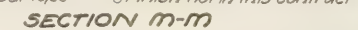
DETAILS
 TUNNEL

SCALE: 0 1 2 FEET. DATE: SEPTEMBER 8, 1964

DRAWN BY M.K.C.
 CHECKED BY E.W.

W. H. Halland
 CHIEF ENGINEER

FILE NO. 1-5A

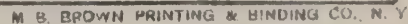


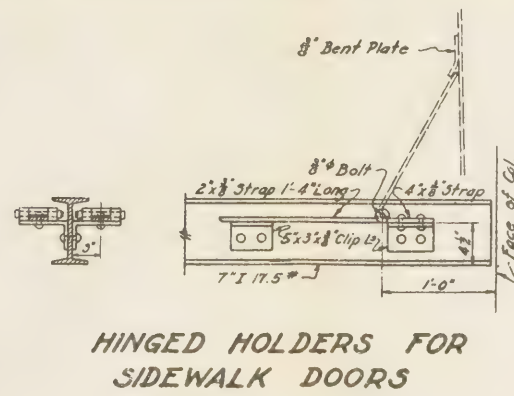
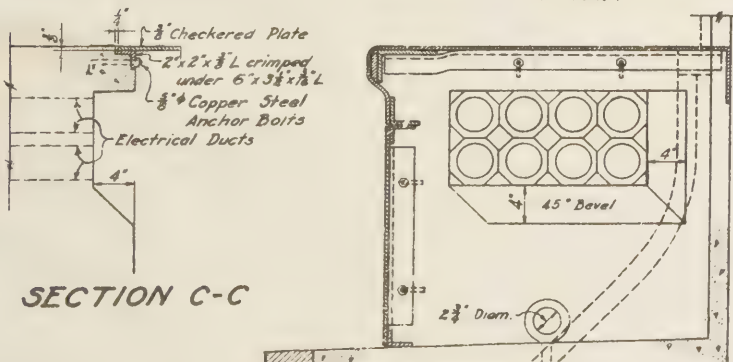
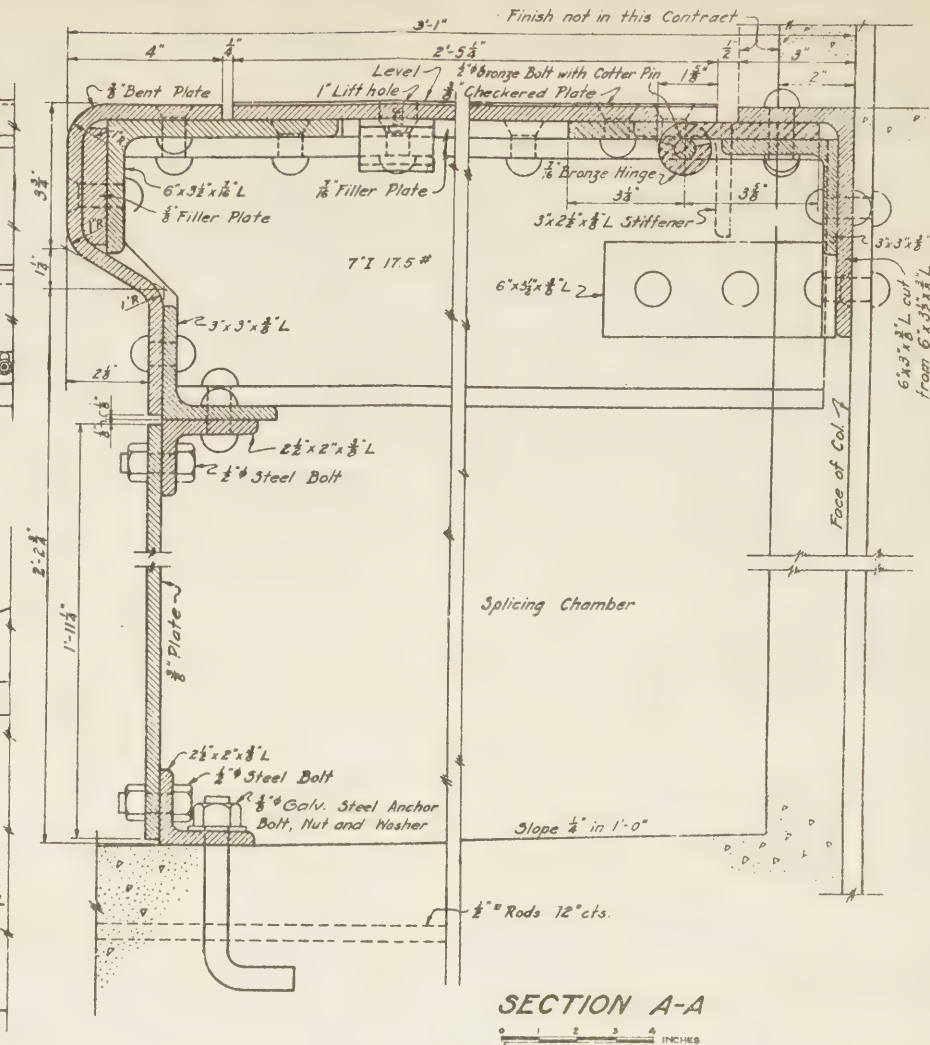
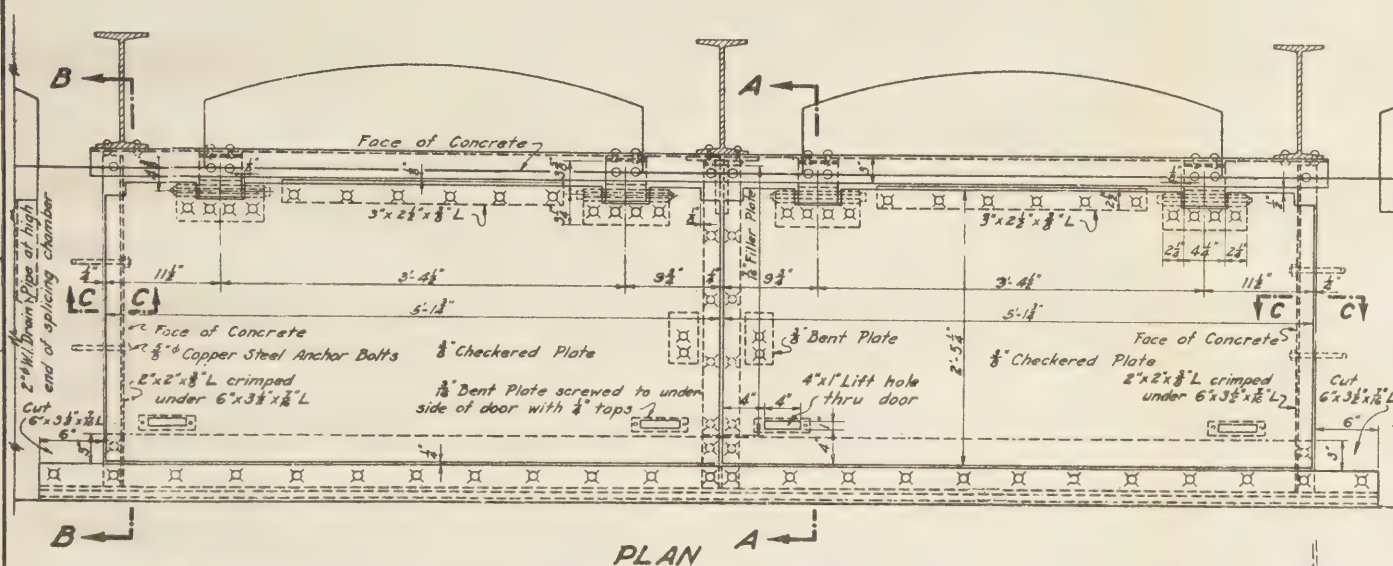
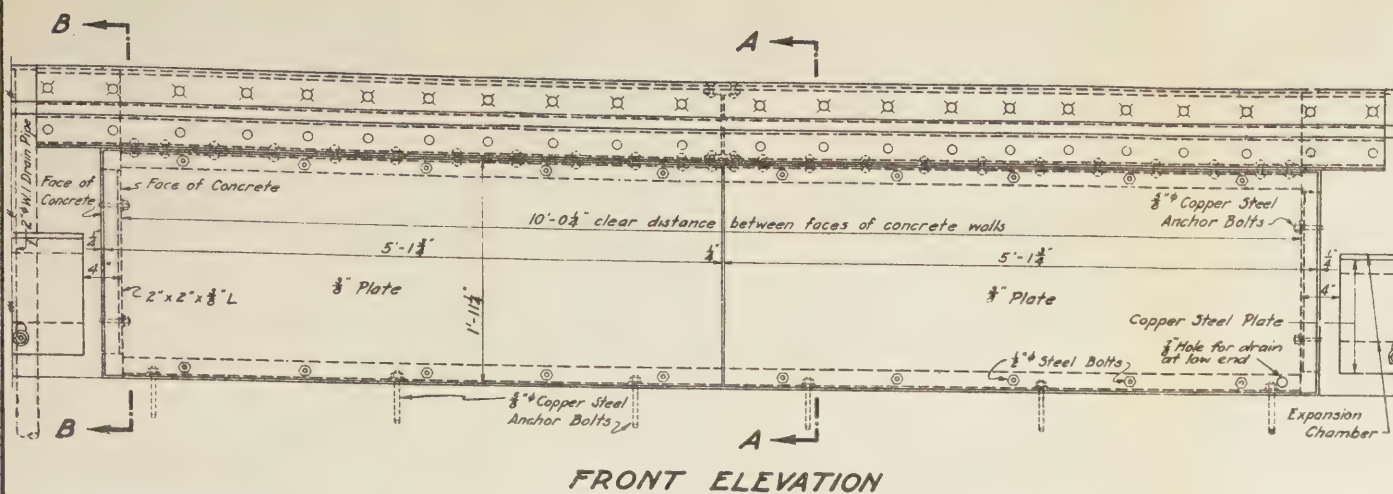
FIRE EXTINGUISHER NICHE

CONCRETE DETAILS
NORTH TUNNEL

M. B. BROWN PRINTING & BINDING CO. N. Y.

Ch. Singstad
ENGINEER OF DESIGNS





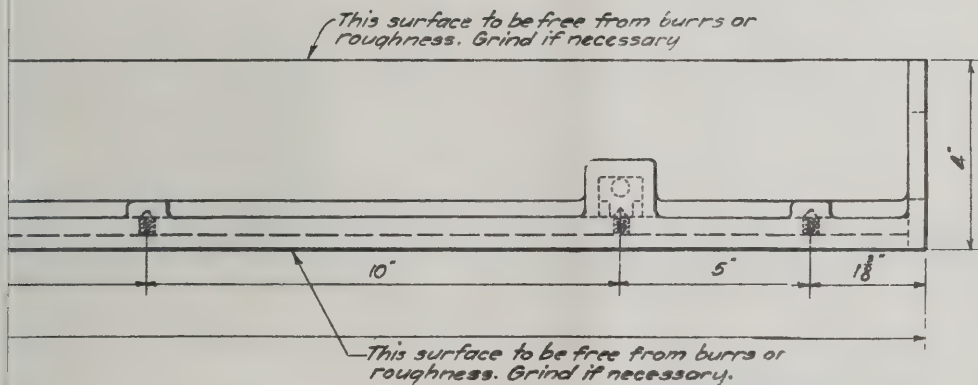
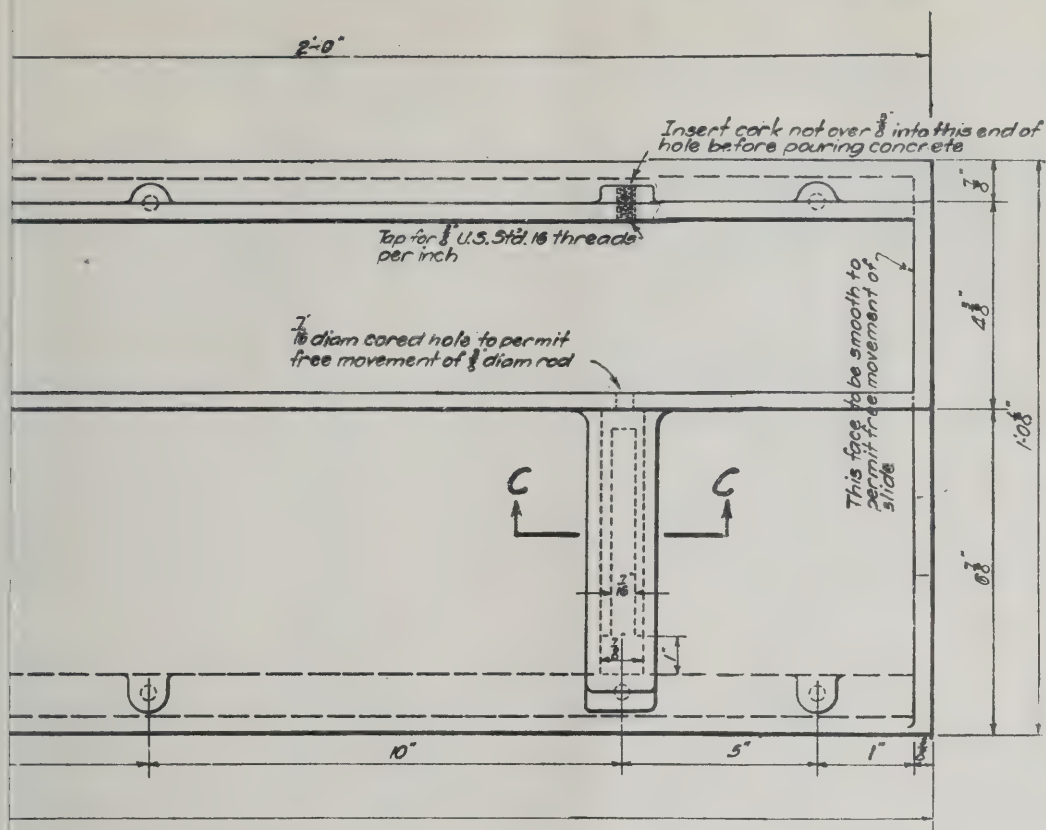
HIGH TENSION DUCT SPLICING CHAMBER

For Alignment and Profile see Dwg. No. 1 File No. 1-5A
 For Plan and Sections... Dwg. 4-5 - 1-5A
 For Interior Details - Dwg. 6 - 1-5A

**NEW YORK STATE
 BRIDGE & TUNNEL COMMISSION
 AND
 NEW JERSEY INTERSTATE
 BRIDGE & TUNNEL COMMISSION
 HUDSON RIVER VEHICULAR TUNNEL
 CONTRACT No. 5A
 CONTRACT DRAWING No. 8**

SCALE: 1" = 4' INCHES DATE: SEPTEMBER 1934
 DRAWN BY SMC
 CHECKED BY S. A. 910
 FILE NO. 1-5A

Oliver Ingstad
 ENGINEER OF DESIGN



See:
 Tapped holes to be spaced by template.
 All threads to be clean and sharp and
 to be protected by rust proof material.

For Alinement and Profile see Dwg. No. 1 File No. 1-5A
 or Structural Plans..... • Dwg. • 4-7 • • 1-5A

NEW YORK STATE
 BRIDGE & TUNNEL COMMISSION
 AND
 NEW JERSEY INTERSTATE
 BRIDGE & TUNNEL COMMISSION
 HUDSON RIVER VEHICULAR TUNNEL
 CONTRACT No. 5 A
 CONTRACT DRAWING No. 9

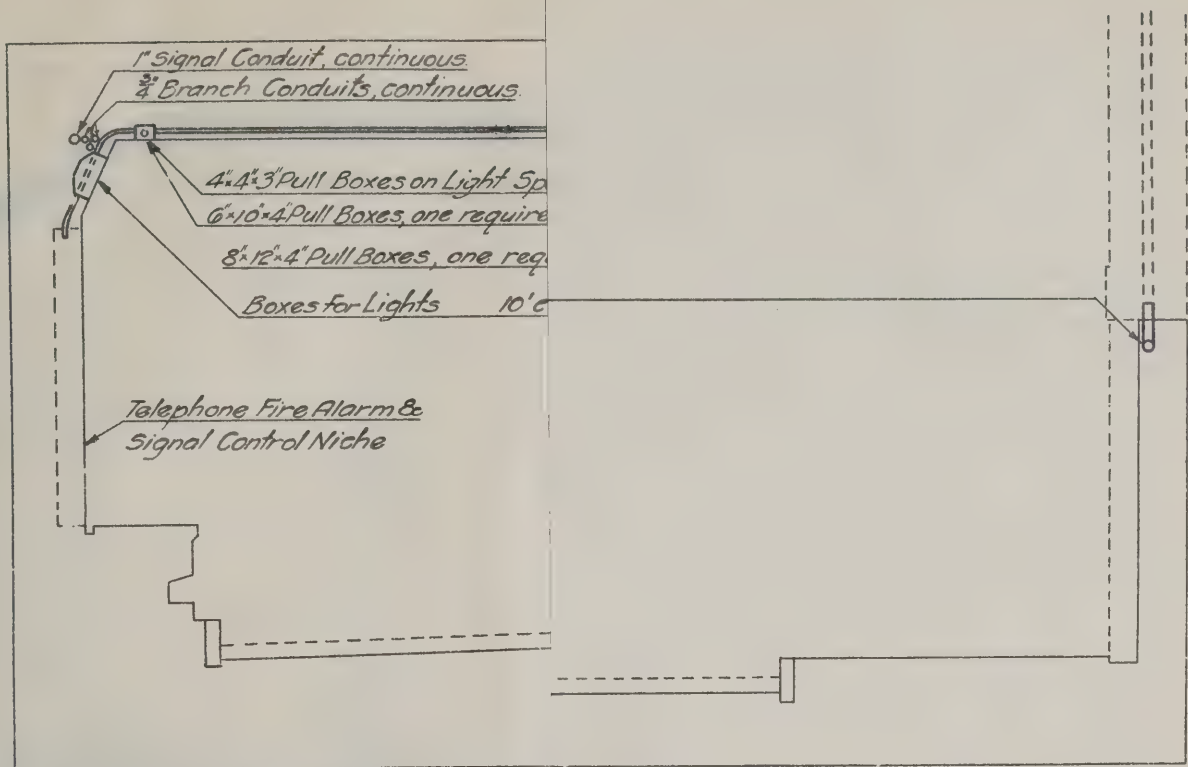
SCALE: 0 1 2 3 INCHES

DATE: SEPTEMBER 8, 1924

DRAWN BY CWM.
 CHECKED BY CWM.

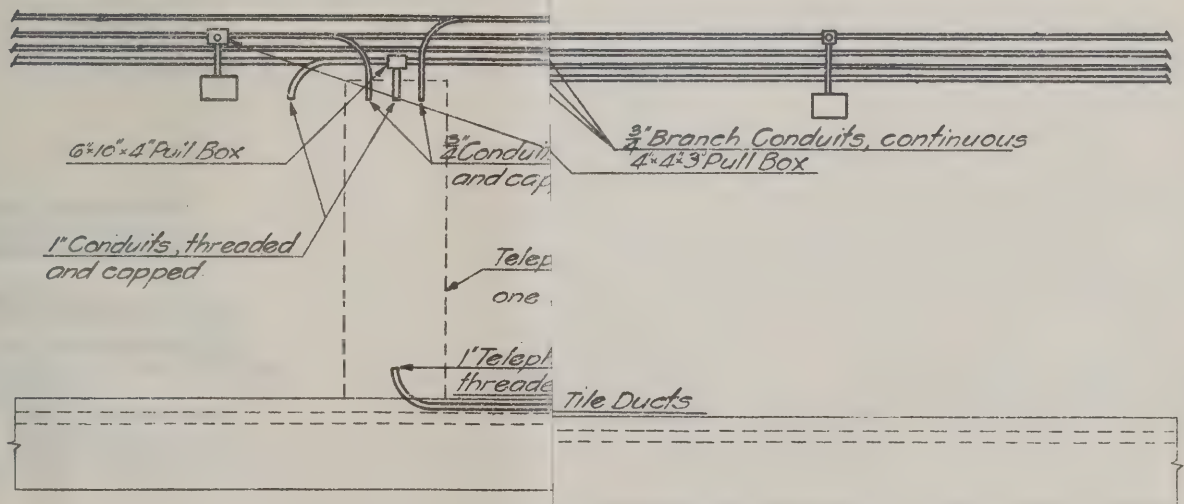
C. M. Holland
 CHIEF ENGINEER

SHEET NO. 1-5A



CROSS SECTION SIDE OF PORTAL

SCALE: $\frac{1}{4}$ " = 1'



NEW YORK STATE
 BRIDGE & TUNNEL COMMISSION

NEW JERSEY INTERSTATE
 BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL

CONTRACT No. 5A
 CONTRACT DRAWING No. 10

SCALE: AS SHOWN.

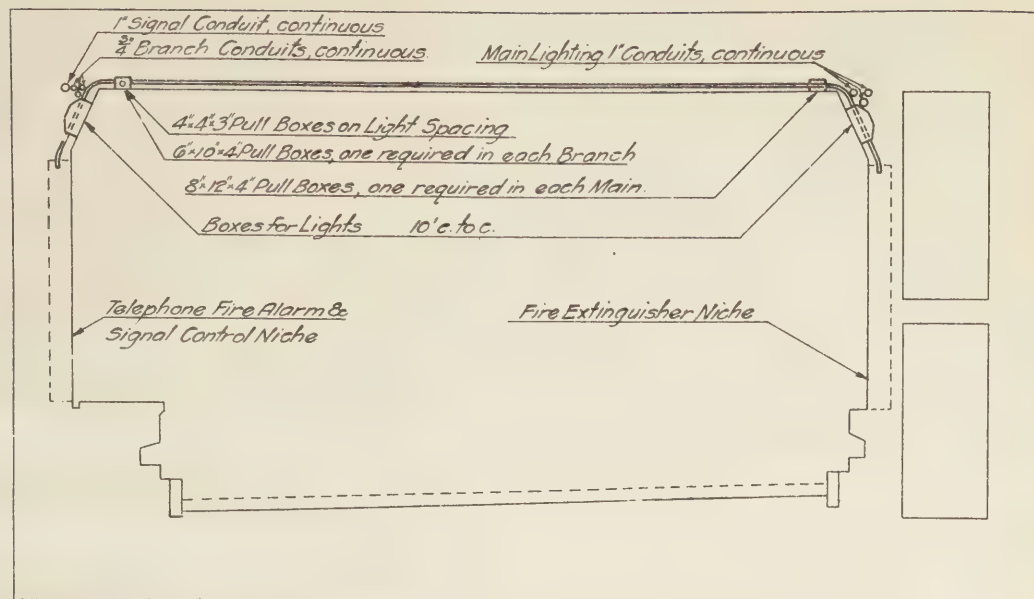
DATE: SEPTEMBER 6, 1924

Chas. Engstad
 ENGINEER OF DESIGNS

DRAWN BY *J. O. G. N. D.*
 CHECKED BY

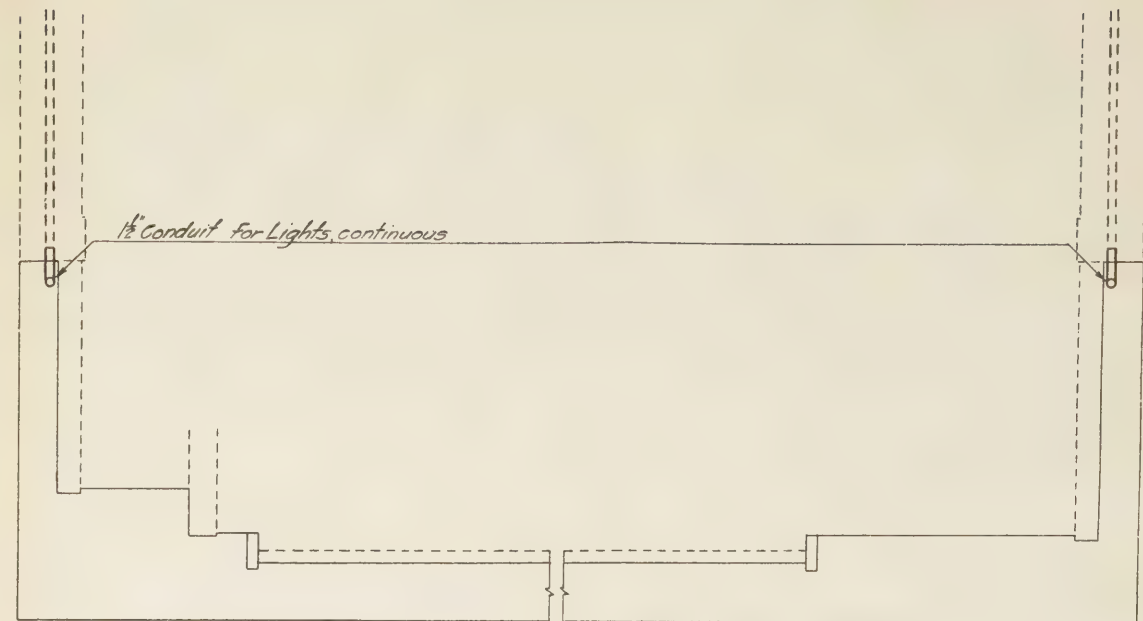
Chas. Engstad
 CHIEF ENGINEER

FILE NO. 1-5A



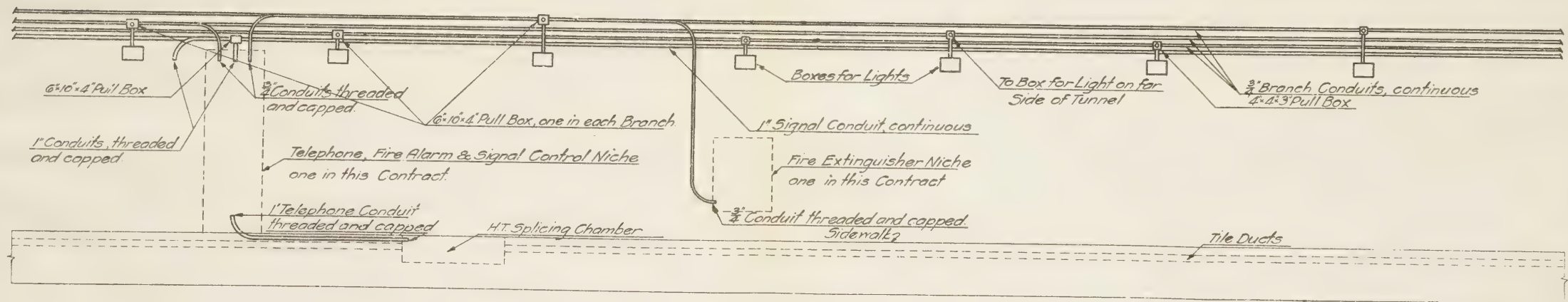
CROSS SECTION INSIDE OF PORTAL

SCALE: 0 1 2 3 FEET



CROSS SECTION OUTSIDE OF PORTAL

SCALE: 0 1 2 3 FEET



ELEVATION SIDEWALK SIDE OF TUNNEL
INSIDE OF PORTAL

SCALE: Not to scale
Diagramatic

For Alignment and Profile, see Dwg. No. 1 File No. 1-5A
For Detail of Light Box, " " " 11 " " 1-5A
For Detail of Pull Boxes, " " " 12 " " 1-5A

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION
HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 5A
CONTRACT DRAWING No. 10

SCALE: AS SHOWN

DATE: SEPTEMBER 6, 1924

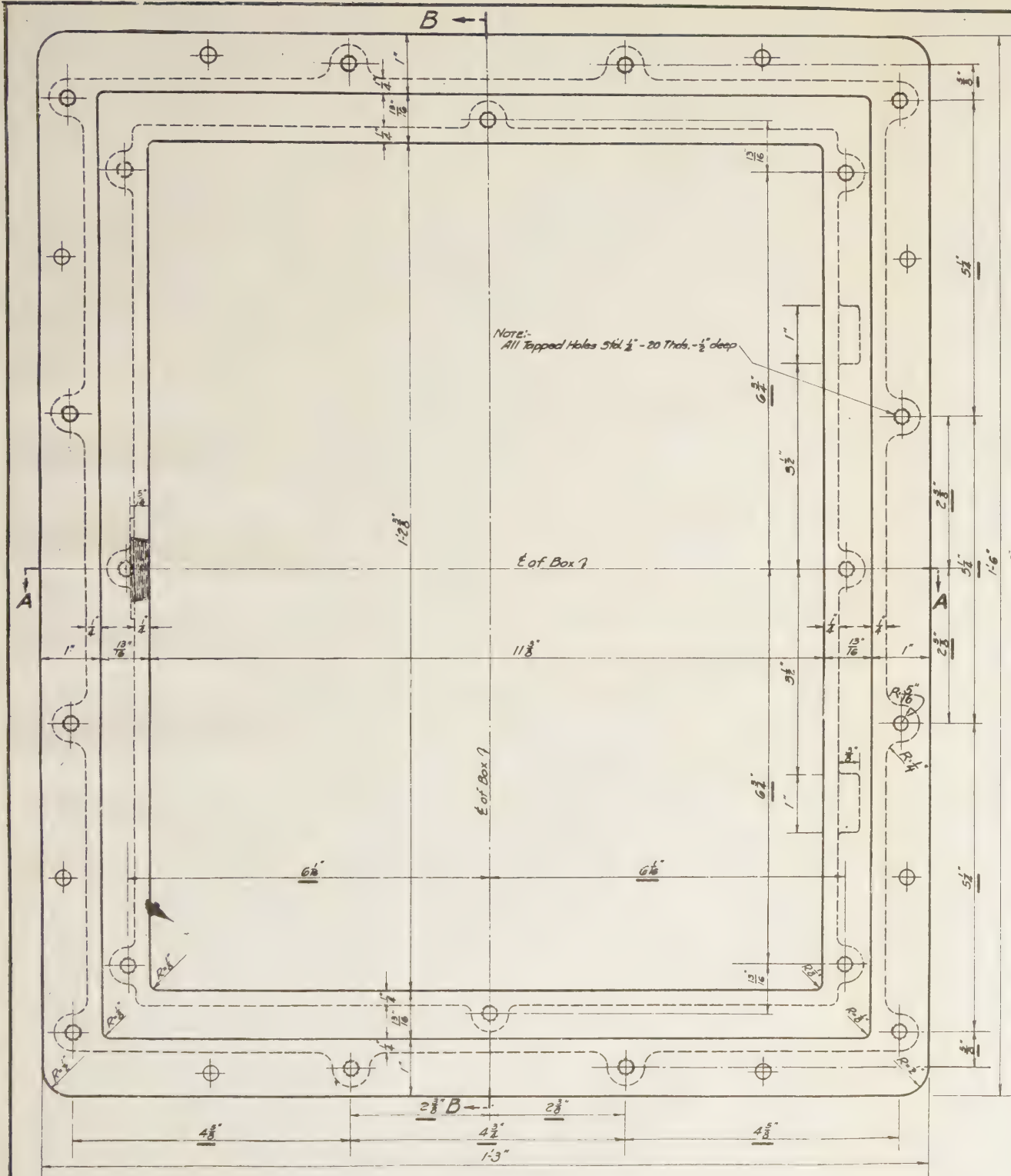
DRAWN BY: J. E. G. n. 0
CHECKED BY: J. E. G. n. 0

Chief Engineer

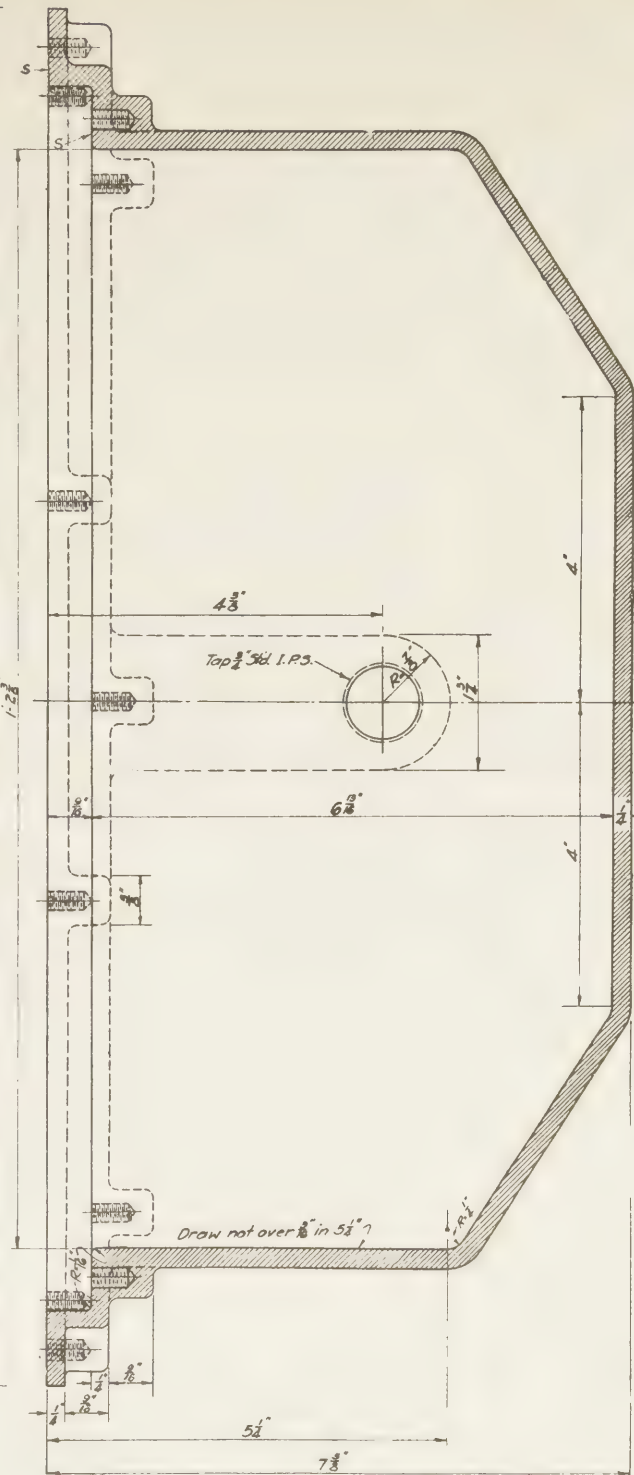
FILE NO. 1-5A

Ob. Singstad
ENGINEER OF DESIGNS

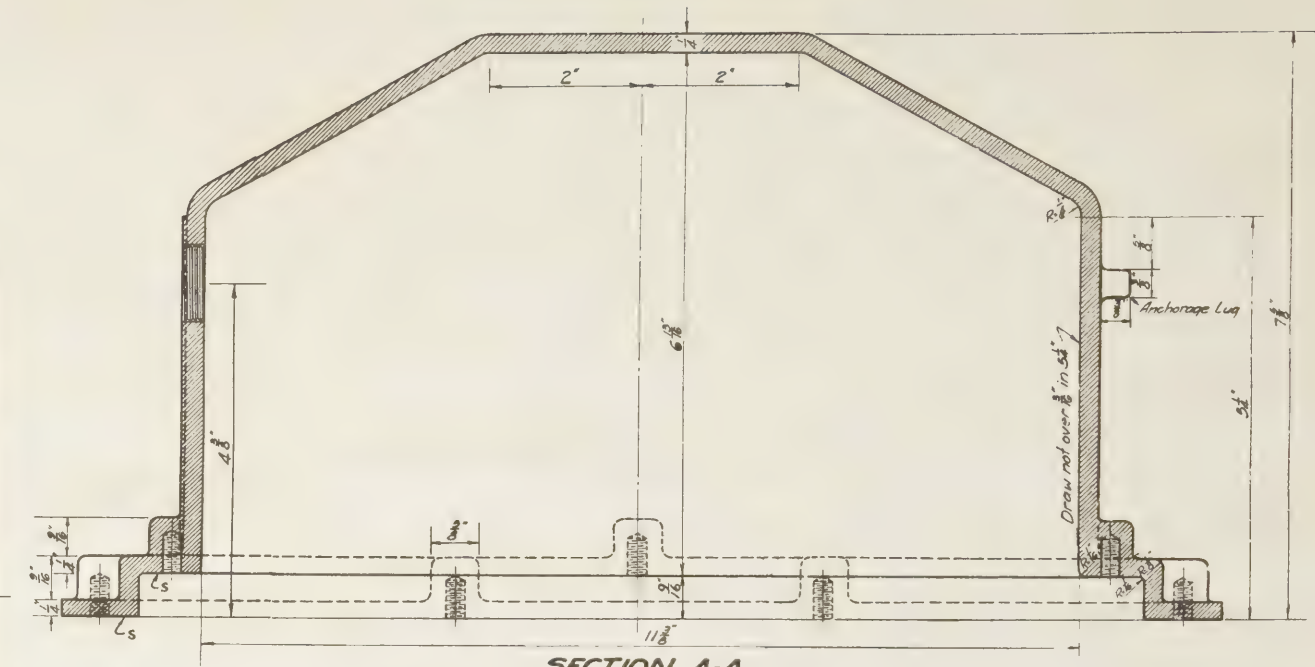
ELECTRICAL CONDUIT SYSTEM



PLAN



SECTION B-B



SECTION A-A

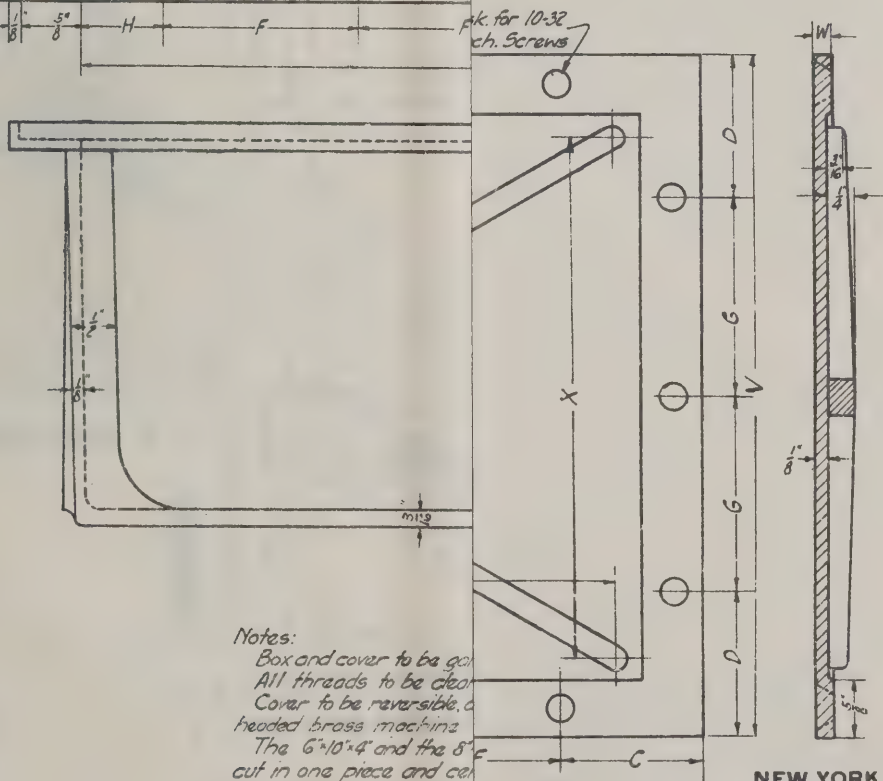
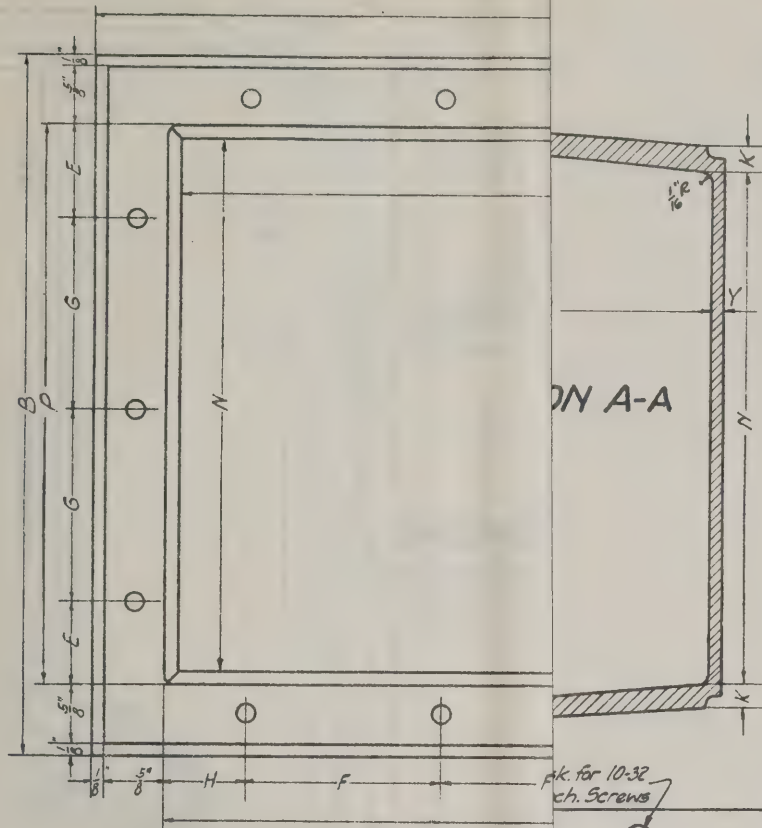
NOTE:
 Box to be galvanized inside and out.
 All Threads to be clean and sharp, free of galvanizing and protected by rust proof material.
 Surfaces marked "S" to be free of burrs and projections and to be ground if necessary.
 All Tapped holes to be drilled to template furnished by the Commissions to insure perfect fitting of future Frame and Cover.
 Dimensions shown thus 5/16" must be exact.
 Holes shown thus are 1/2" holes for attaching box to form and are to be located approximately as shown.

For Alinement and Profile..... see Dwg. No. 1 File No. 1-5A
 For Structural Plans..... " Dwg. " 4-7 " " 1-5A
 For Electrical Conduit System " Dwg. " 10 " " 1-5A

NEW YORK STATE
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 BRIDGE & TUNNEL COMMISSION
 HUDSON RIVER VEHICULAR TUNNEL
 CONTRACT No. 5A
 CONTRACT DRAWING No. II

SCALE 1" = 1' INCHES.
 DATE: SEPTEMBER 8, 1924
 DRAWN BY: MRE
 CHECKED BY: J. A. G. R. B.
 CHIEF ENGINEER
 FILE NO. 1-5A

CAST IRON LIGHT BOX



Notes:

Box and cover to be gal.
All threads to be clear
Cover to be reversible, a
headed brass machine.
The 6"x10"x4" and the 8"
cut in one piece and cel

For Alinement and Profile
For Structural Plans
For Electrical Conduit

Y	Y	Z
$\frac{1}{8}$	$\frac{1}{8}$	$3\frac{3}{8}$
$\frac{3}{16}$	$\frac{3}{16}$	$9\frac{3}{16}$
$\frac{2}{16}$	$\frac{2}{16}$	$11\frac{3}{16}$

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION
HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 5A
CONTRACT DRAWING No. 12

SCALE. NOT TO SCALE

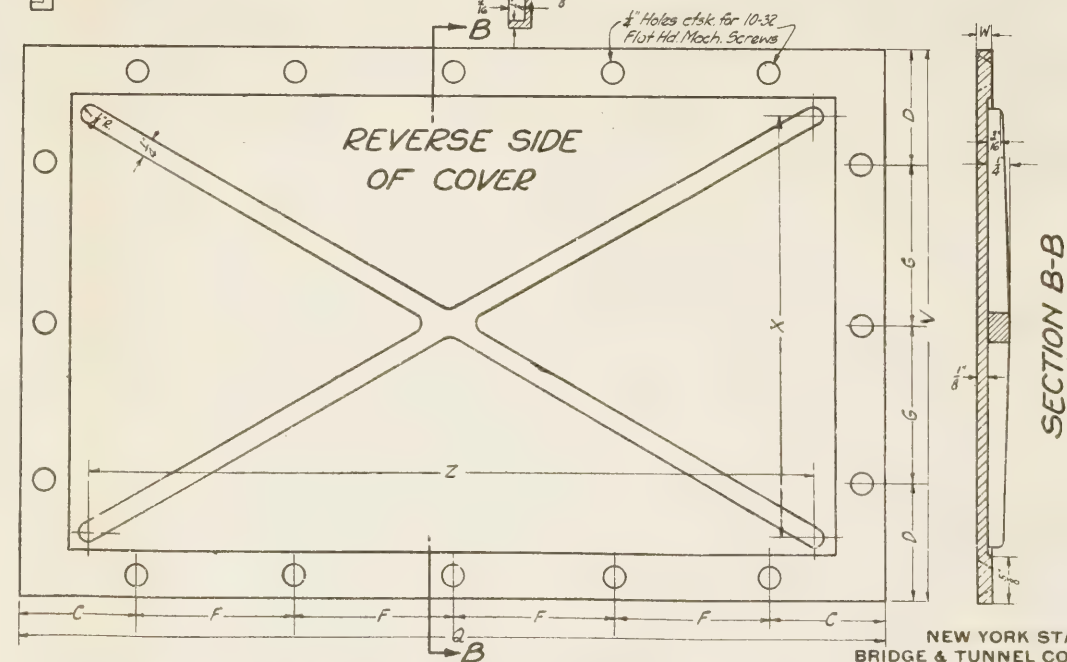
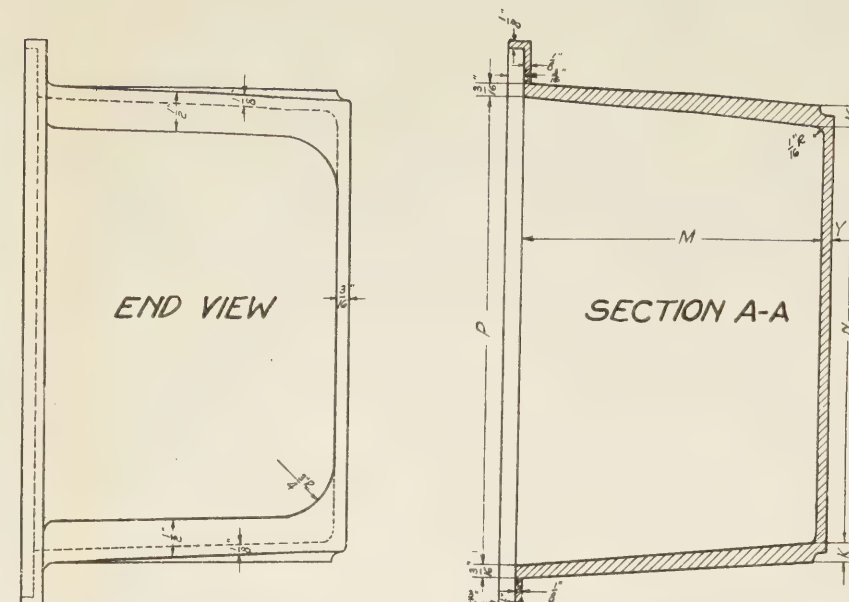
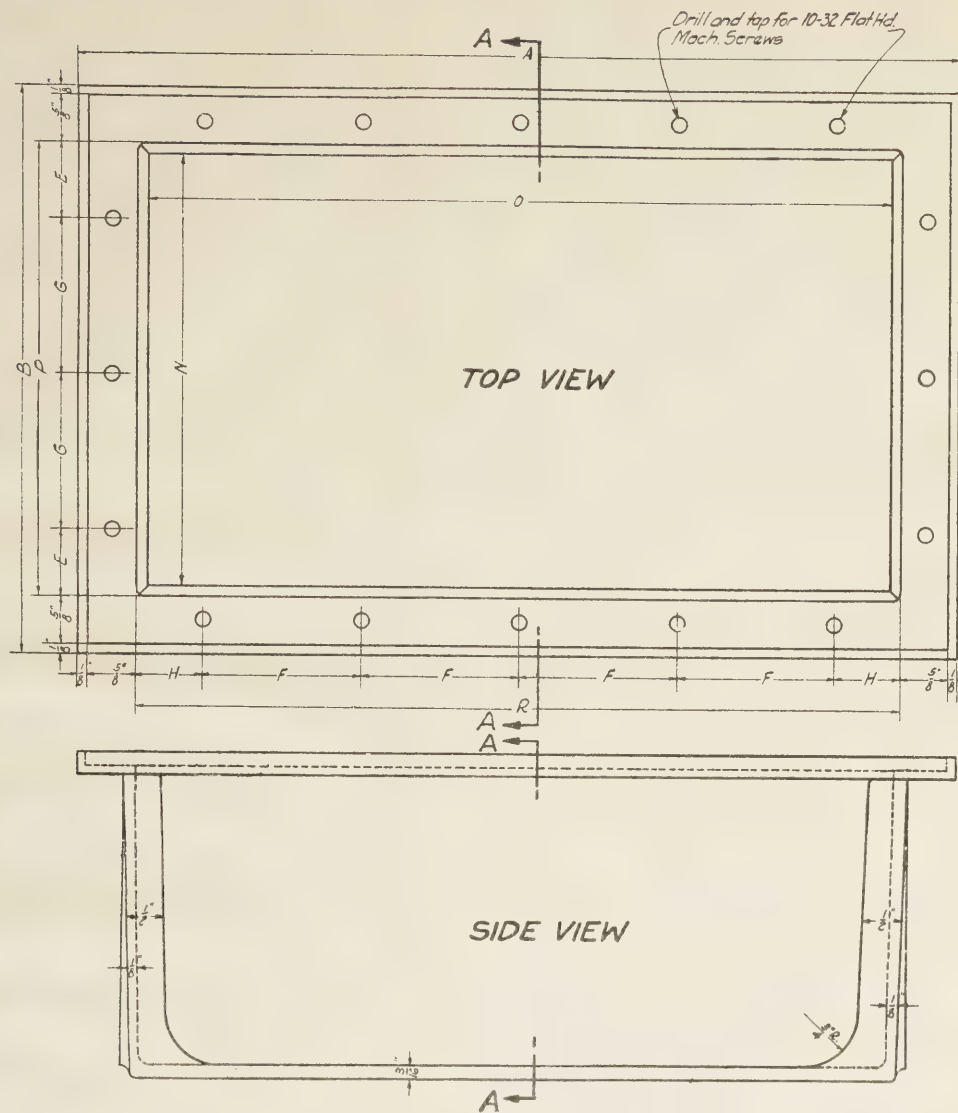
DATE: SEPTEMBER 8, 1954

DRAWN BY 550
CHECKED BY 92 9.2.0

CHIEF ENGINEER

FILE NO. 1-5A

Ole Singstad
ENGINEER OF DESIGNS



Notes:
Box and cover to be galvanized inside and out.
All threads to be clean and sharp, free from galvanizing.
Cover to be reversible, and fastened to box with 10-32 flat headed brass machine screws.
The 6"x10"x4" and the 8"x12"x4" Boxes to have 1/8" felt gasket cut in one piece and cemented to flange of box.

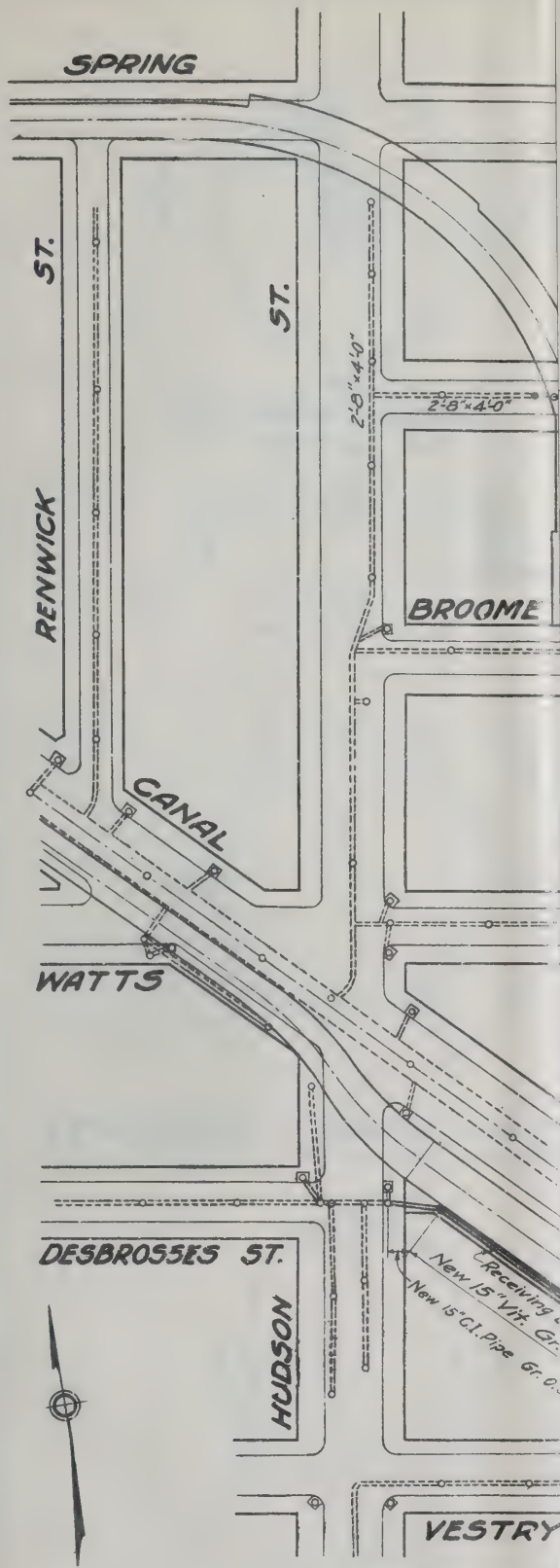
For Alignment and Profile ... see Dwg. No. 1 File No. 1-5A
For Structural Plans ... Dwg. - 2-7 - 1-5A
For Electrical Conduit System ... Dwg. - 10 - 1-5A

TYPE OF BOX	A	B	C	D	E	F	G	H	K	M	N	O	P	Q	R	V	W	X	Y	Z
4"x4"x3" deep	5 1/2	5 1/2	1 1/2	1 1/2	1 1/2	2 1/2	2 1/2	7 1/2	4 1/2	3 1/2	3 1/2	4 1/2	5 1/2	4 1/2	5 1/2	8 1/2	3 1/2	3 1/2	3 1/2	
6"x10"x4"	11 1/2	7 1/2	1 1/2	1 1/2	1 1/2	2 1/2	2 1/2	7 1/2	4 1/2	5 1/2	9 1/2	6 1/2	11 1/2	10 1/2	7 1/2	8 1/2	5 1/2	5 1/2	9 1/2	
8"x12"x4"	13 1/2	9 1/2	1 1/2	1 1/2	1 1/2	2 1/2	2 1/2	7 1/2	4 1/2	7 1/2	11 1/2	8 1/2	13 1/2	12 1/2	9 1/2	8 1/2	7 1/2	5 1/2	11 1/2	

NEW YORK STATE
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NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION
HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 5A
CONTRACT DRAWING No. 12

SCALE: NOT TO SCALE
DATE: SEPTEMBER 8, 1906
DRAWN BY: S.E.G.
CHECKED BY: J.R.G.
CHIEF ENGINEER
FILE NO. 1-5A

CAST IRON PULL BOXES



For alinement and profile
see Drawing No. 1, File No. 1-5A
For details of Inlets, Basins, Manholes and Sewers
see Drawing No. 15 File No. 1-5A
For details of Cast Iron for Inlets, Basins and Manholes
see Drawing No. 14 File No. 1-5A

Note:-

All existing sewers which are to be retained shall be rebuilt if disturbed, and no payment will be made for same unless otherwise specifically provided for in the contract.

LEGEND:-

New sewers	—●—
Existing sewers retained	- - - ● - - -
Existing sewers abandoned	- - - ○ - - -
New manholes	●
New basins	■
Existing manholes	○
Existing basins	□

Chas. S. Sargent
ENGINEER OF DESIGNS

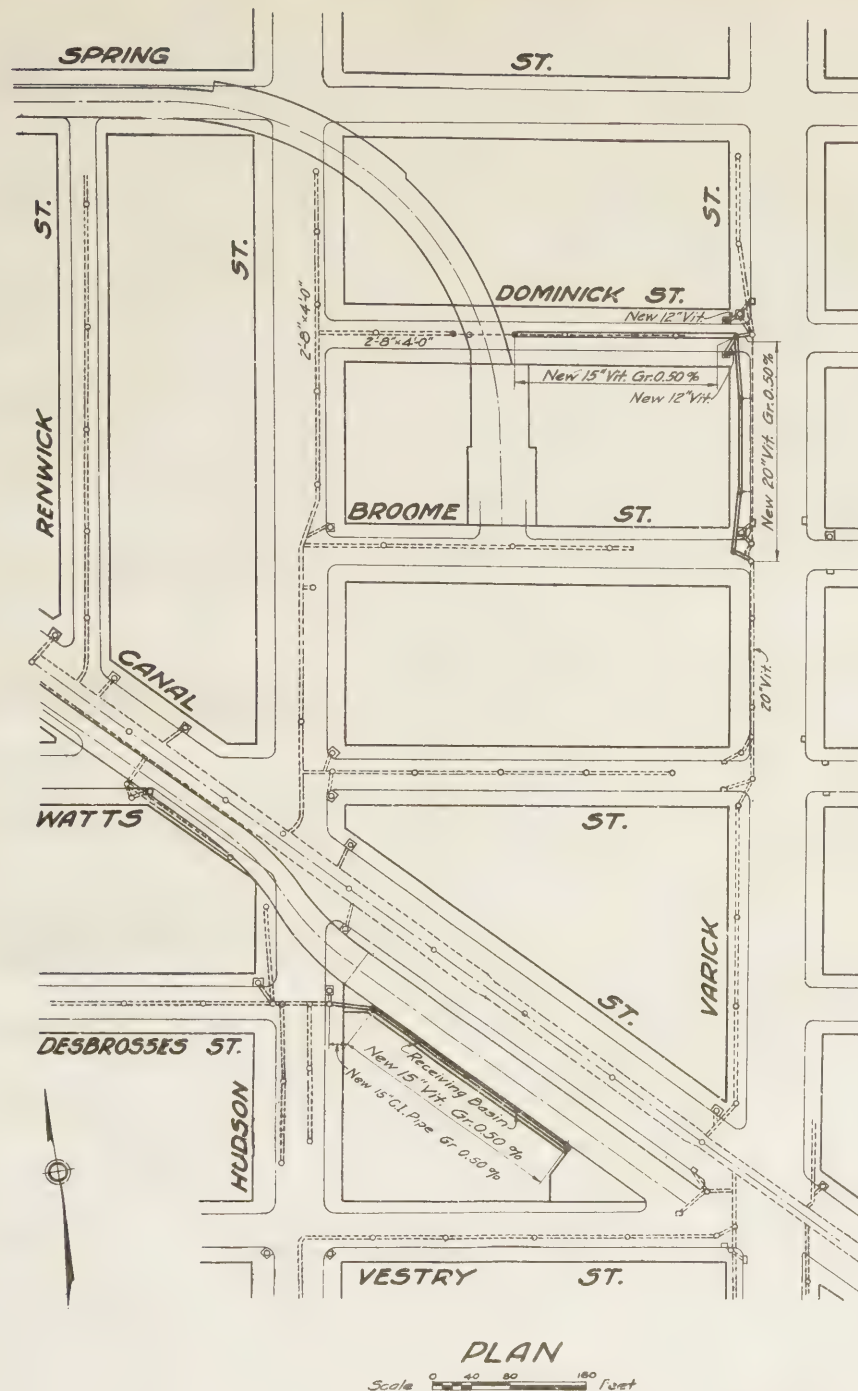
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DATE: SEPTEMBER 3, 1924

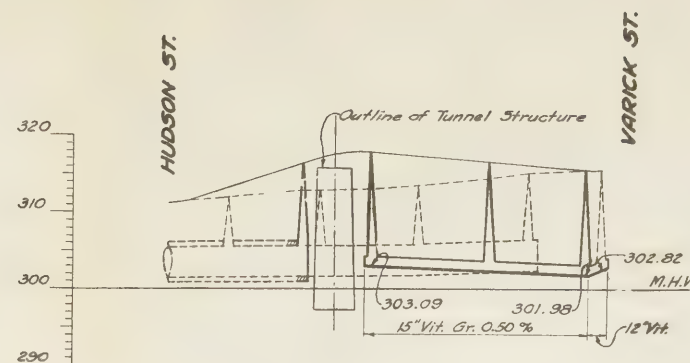
DRAWN BY C. S. S.
CHECKED BY *[Signature]*

Chas. S. Sargent
CHIEF ENGINEER

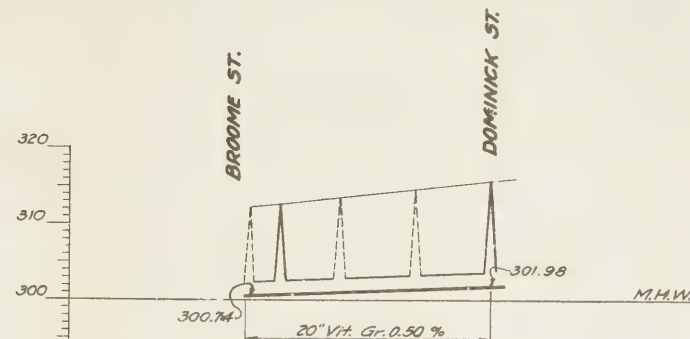
FILE NO. 1-5A



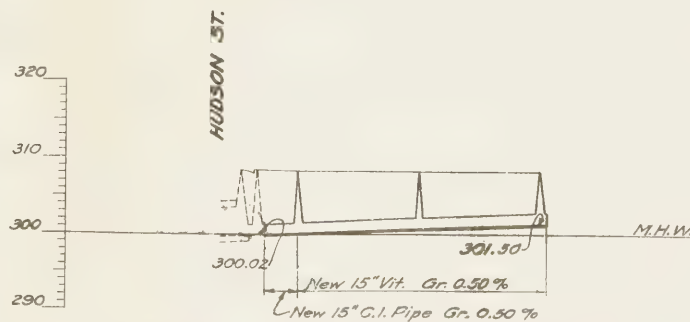
PLAN OF SEWER CONSTRUCTION



PROFILE - DOMINICK STREET



PROFILE - VARICK STREET



PROFILE - SOUTH OF CANAL STREET
OPEN APPROACH SECTION

For alinement and profile see Drawing No. 1, File No. I-5A
For details of Inlets, Basins, Manholes and Sewers see Drawing No. 15 File No. I-5A
For details of Cast Iron for Inlets, Basins and Manholes see Drawing No. 14 File No. I-5A

Note:-
All existing sewers which are to be retained shall be rebuilt if disturbed, and no payment will be made for same unless otherwise specifically provided for in the contract.

LEGEND:-

New sewers
Existing sewers retained
Existing sewers abandoned
New manholes
New basins
Existing manholes
Existing basins

NEW YORK STATE
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NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION
HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 5A
CONTRACT DRAWING No. 13

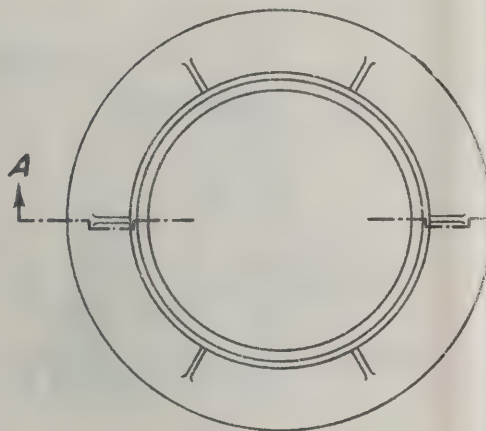
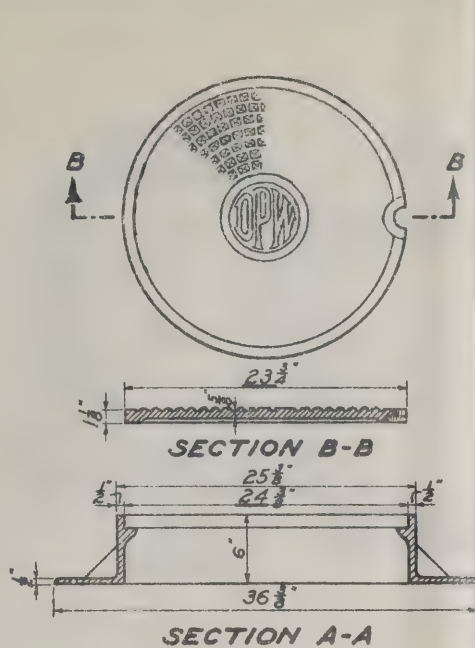
SCALE AS SHOWN

DATE: SEPTEMBER 10, 1924

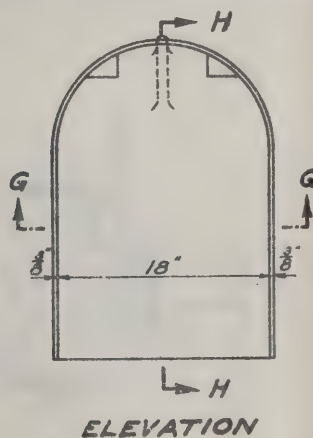
DRAWN BY C. S. 77
CHECKED BY J. P.

Chief Engineer

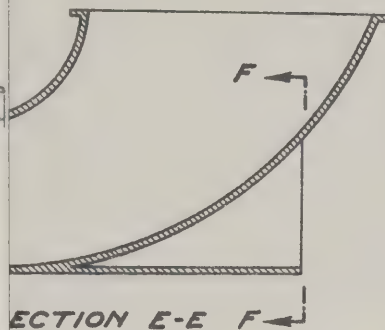
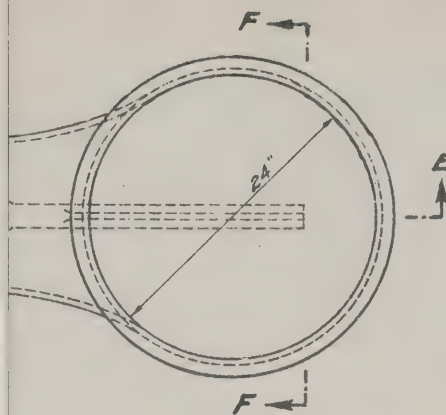
FILE NO. I-5A



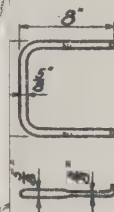
STANDARD FRAME AND COVER FOR SIDEWALK MANHOLES AND RECEIVING BASINS



SECTION G-G STANDARD HO FOR RECEIVING



STANDARD BOWL FOR INLET BASINS



Plan of Sewer Construction see Drawing No.13, File No.1-5A
Details of Inlets, Basins, Manholes and Sewers.
see Drawing No.15, File No.1-5A
Notes for Manhole Covers and Edges of Covers to be
machined.

**NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION**

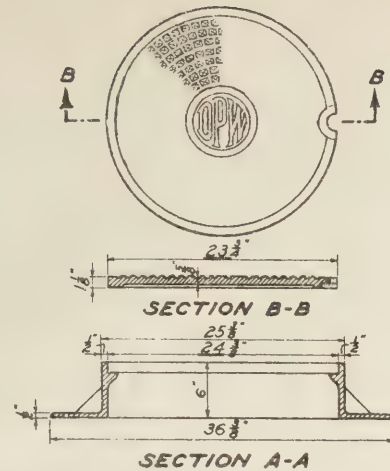
**HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 5A
CONTRACT DRAWING No.14**

SCALE: 0 3 6 9 12 INCHES DATE: SEPTEMBER 5, 1924

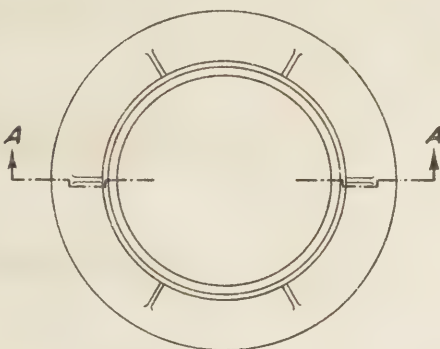
DRAWN BY: J. J. K. CO.
CHECKED BY: J. J. K. CO.

Chas. H. Hall
CHIEF ENGINEER

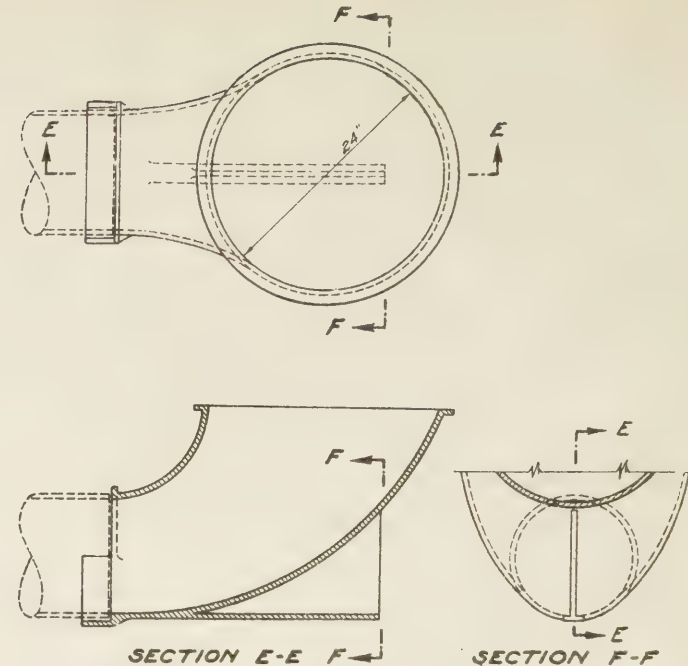
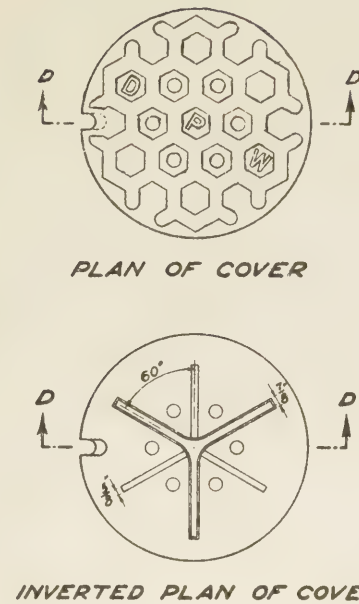
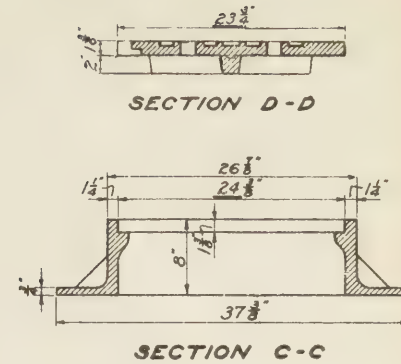
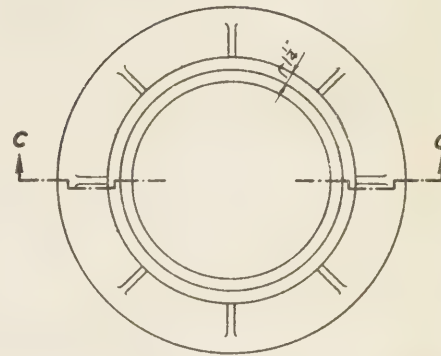
FILE NO. 1-5A



STANDARD FRAME AND COVER
FOR SIDEWALK MANHOLES AND RECEIVING BASINS



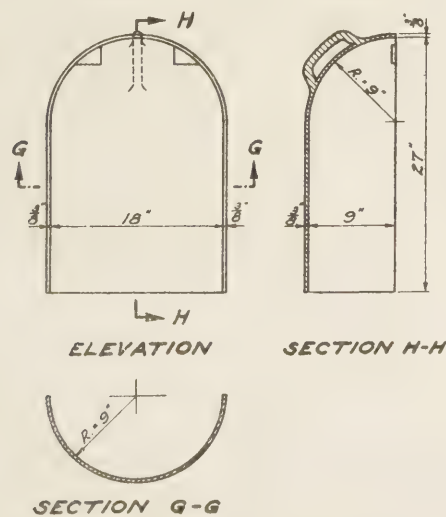
STANDARD FRAME AND COVER
FOR ROADWAY MANHOLES



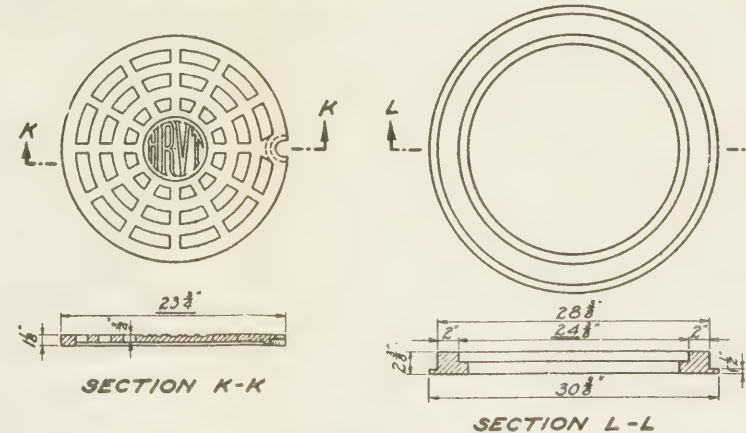
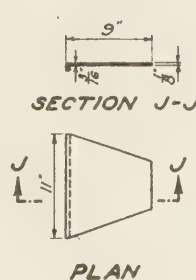
STANDARD BOWL
FOR INLET BASINS



STANDARD WROUGHT IRON STEP



STANDARD HOOD AND PLATE
FOR RECEIVING BASINS



SPECIAL FRAME AND COVER
FOR RECEIVING BASINS

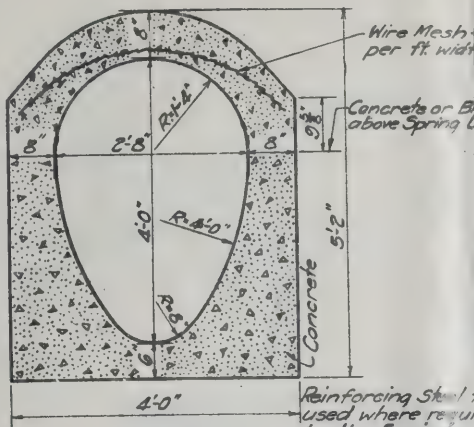
For Plan of Sewer Construction see Drawing No.13, File No.1-5A
For Details of Inlets, Basins, Manholes and Sewers.
see Drawing No.15, File No.1-5A
Seats for Manhole Covers and Edges of Covers to be machined.

SCALE: 0' 1' 2' 3' 4' 5' 6' 7' 8' 9' 10' INCHES DATE: SEPTEMBER 5, 1914

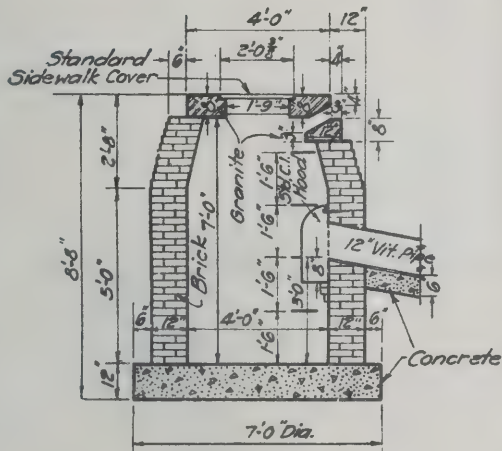
DRAWN BY: J. J. C. CHECKED BY: J. J. C. CHIEF ENGINEER
NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION
HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 5A
CONTRACT DRAWING No.14
FILK NO 1-5A

Alfred Engstrom
ENGINEER OF DESIGN

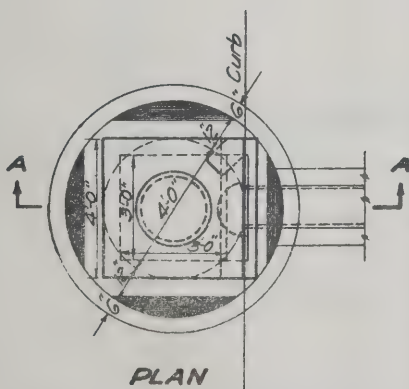
CAST IRON SEWER DETAILS



TYPICAL



SECTION A-A



PLAN

RECEIVING BASIN

SCALE: 0 1 2 3 FEET

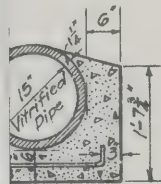
Oliver S. Smith
ENGINEER OF DESIGN

struction.

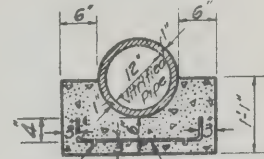
see Drawing No. 13, File No. 1-5A
for Inlets, Basins, and Manholes

see Drawing No. 14, File No. 1-5A

of basins, and Exterior surfaces of Manhole walls to be plastered with cement mortar $\frac{1}{2}$ " thick.



Longitudinal Rods-
3- $\frac{1}{2}$ "-24" Lap 18'-0" long

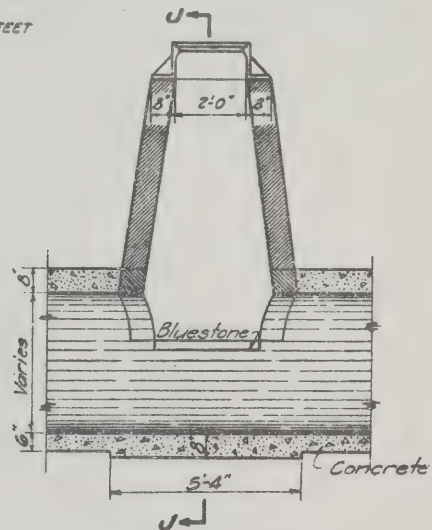


Transverse Rods
2- $\frac{1}{2}$ "-12" Cts. 2'-5" long

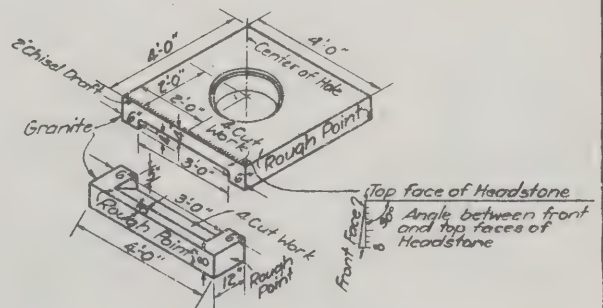
Reinforcing Steel to be used where required by the Engineer.

EAR SEWERS

1 2 FEET



SECTION K-K



DETAIL OF CUTTING OF HEAD & GUTTER STONES

SCALE: 0 1 2 3 FEET

NEW YORK STATE
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AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL

CONTRACT No. 5A

CONTRACT DRAWING No. 15

SCALE: AS SHOWN

DATE: SEPTEMBER 8, 1924

Chas. H. Halland
CHIEF ENGINEER

DRAWN BY *J. K. M.*
CHECKED BY *J. K. M.*

FILE No. 1-5A

NOTE:

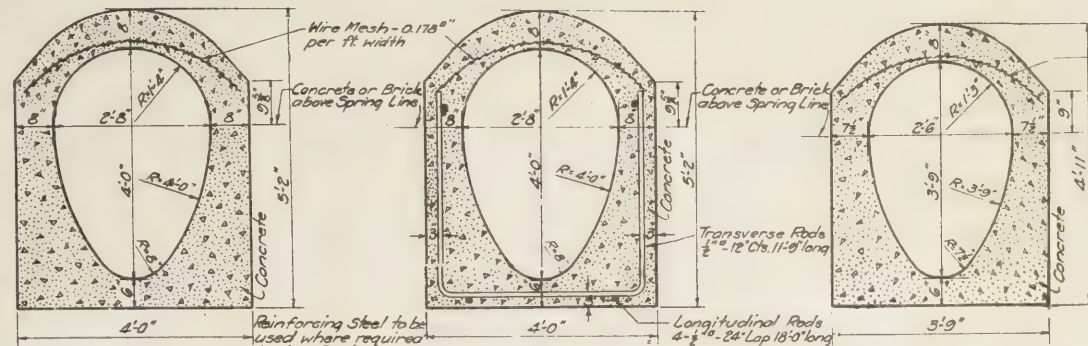
For Plan of Sewer construction

see Drawing No. 13, File No. 1-5A

For Details of Cast Iron for Inlets, Basins, and Manholes

see Drawing No. 14, File No. 1-5A

Interior and Exterior walls of basins, and Exterior surfaces of Manhole walls and brick sewer arches to be plastered with cement mortar $\frac{1}{2}$ " thick.



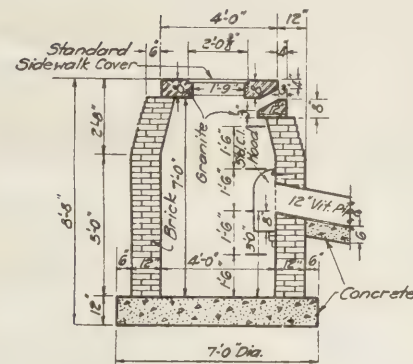
TYPICAL

TYPICAL-REINFORCED

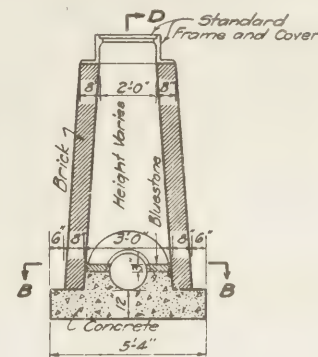
TYPICAL

EGG SHAPED SEWERS

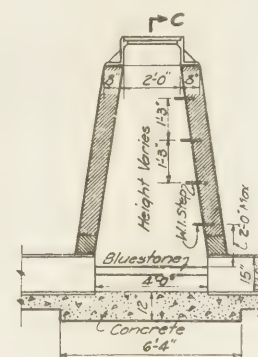
SCALE: 0 1 2 FEET



SECTION A-A



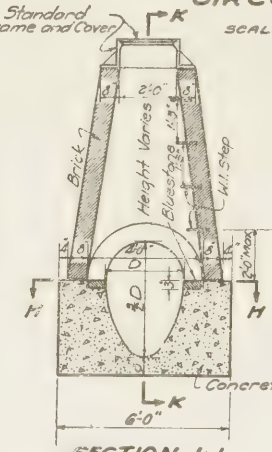
SECTION C-C



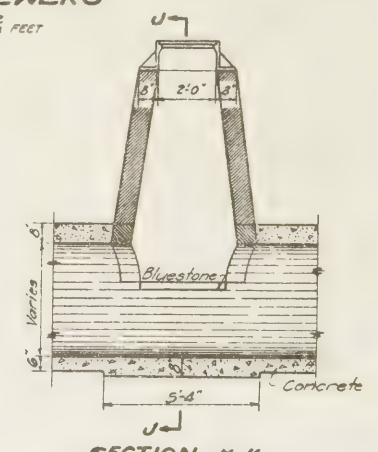
SECTION D-D

CIRCULAR SEWERS

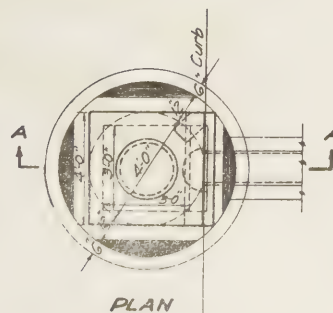
SCALE: 0 1 2 FEET



SECTION J-J



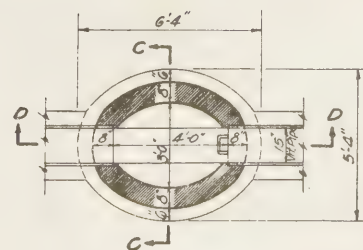
SECTION K-K



PLAN

RECEIVING BASIN

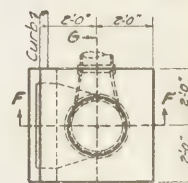
SCALE: 0 1 2 FEET



SECTION B-B

TYPE "A" MANHOLE FOR CIRCULAR SEWER

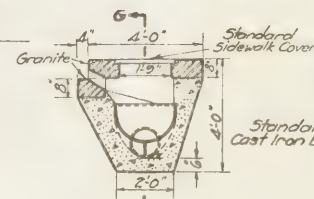
SCALE: 0 1 2 FEET



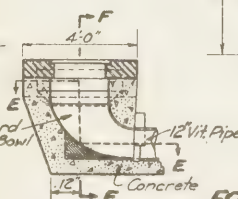
PLAN



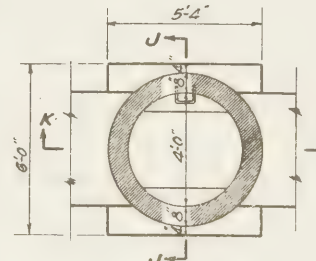
SECTION E-E



SECTION F-F



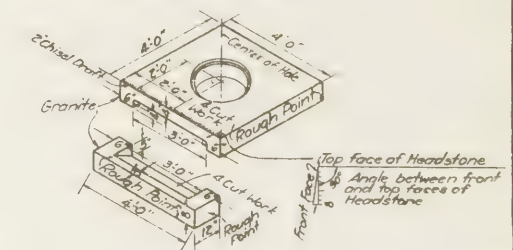
SECTION G-G



SECTION H-H

TYPE "B" MANHOLE FOR EGG SHAPED SEWER

SCALE: 0 1 2 FEET



DETAIL OF CUTTING OF HEAD & GUTTER STONES

SCALE: 0 1 2 FEET

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION

AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL

CONTRACT NO. 5A

CONTRACT DRAWING NO. 15

SCALE: AS SHOWN

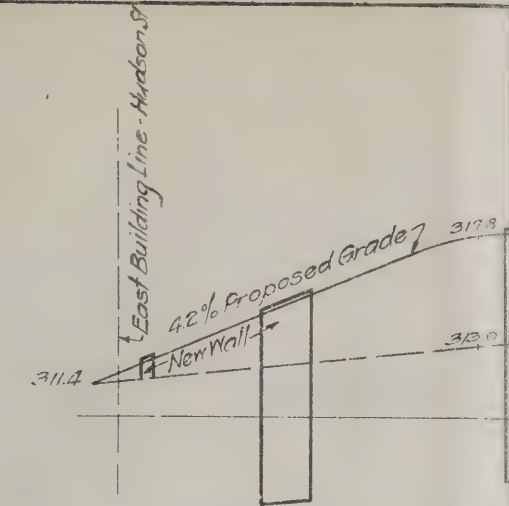
DATE: SEPTEMBER 8, 1924

Ed. J. Hall
CHIEF ENGINEER

DRAWN BY: *Ed. J. Hall*
CHECKED BY: *Ed. J. Hall*

FILE NO. 1-5A

M. B. BROWN PRINTING & BINDING CO., N. Y.



PROFILE ON CENTER

SCALE HORIZONTAL
VERTICAL

ST.

HUDSON

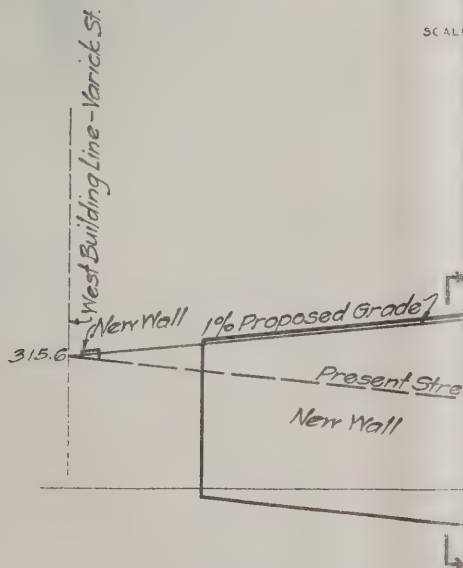
311.4+

DOMINICK

317.8

317.8

SCALE



PROFILE ON CENTER

Chas. Fingstad
ENGINEER OF DESIGN

SCALE: AS SHOWN

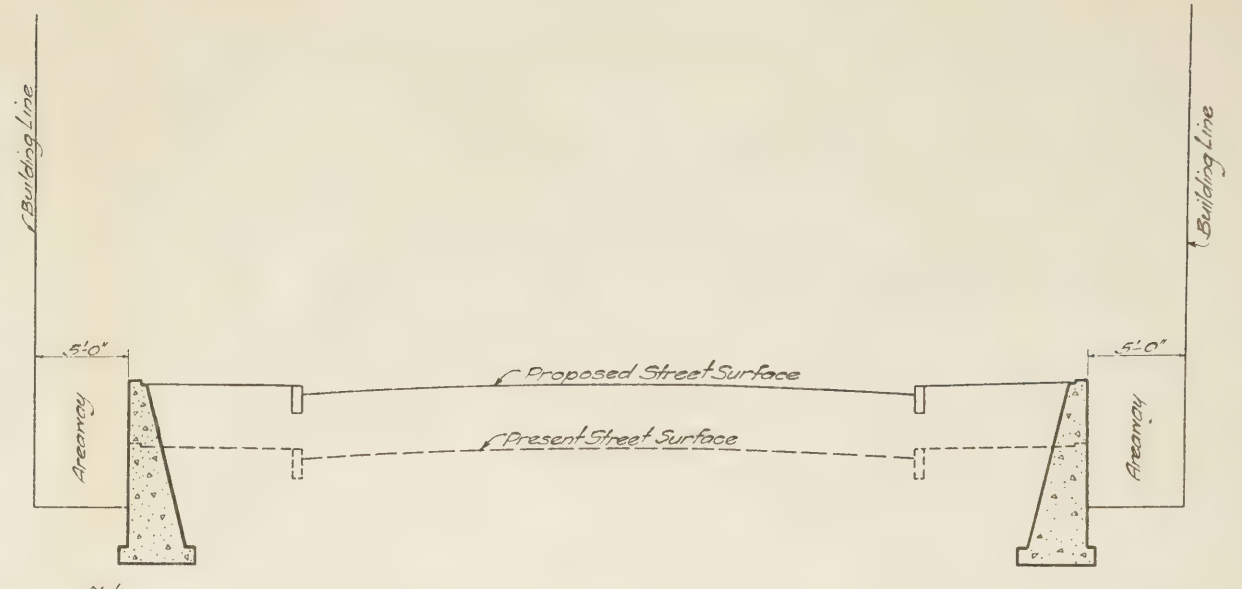
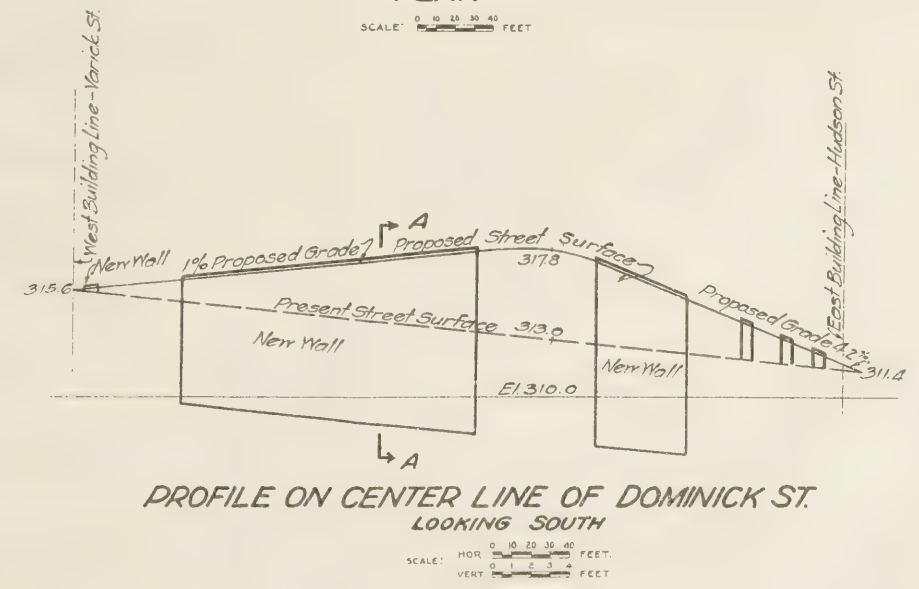
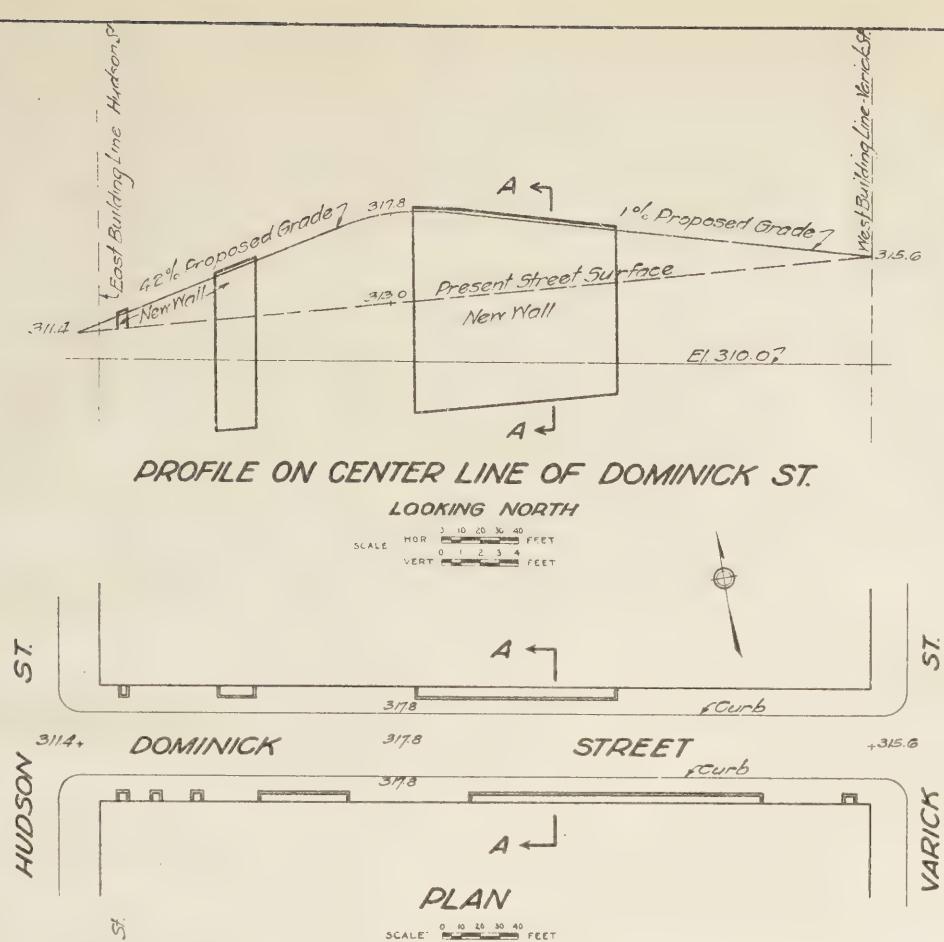
DATE: SEPTEMBER 9, 1924

DRAWN BY *C.P.B.*
CHECKED BY *M.E. C.W.*

Chas. Fingstad
CHIEF ENGINEER

FILE NO. I-5A

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION
HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 5A
CONTRACT DRAWING No. 18



For Alinement and Profile of Tunnels, see Dwg. No. 1, File No. I-5A

REGRAIDING OF DOMINICK ST.

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION
HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 5A
CONTRACT DRAWING No. 18

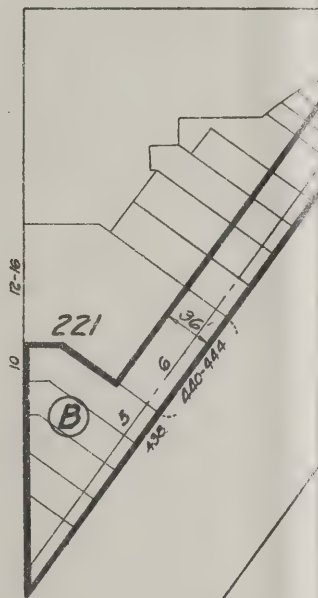
SCALE: AS SHOWN
DATE: SEPTEMBER 8, 1924
DRAWN BY: L. R. S.
CHECKED BY: M. B. S.
FILE NO. I-5A

CANAL

VESTRY

ST.

HUDSON



LEGEND:



Denotes area available for Contractor's use.



Denote areas available for Contractor's use and location of tunnel Structures.

NOTES:

221 Denotes Block Numbers

12 " Lot "

590 " Street "

Buildings on areas available for Contractor's use, and on areas available for Contractor's use and location of tunnel structures are to be razed by the Contractor.

For Alinement and Profile see Drawing No.1, File No. I-5A.

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 5A
CONTRACT DRAWING No.17

SCALE: 0 20 40 60 FEET

DATE: SEPTEMBER 6, 1924

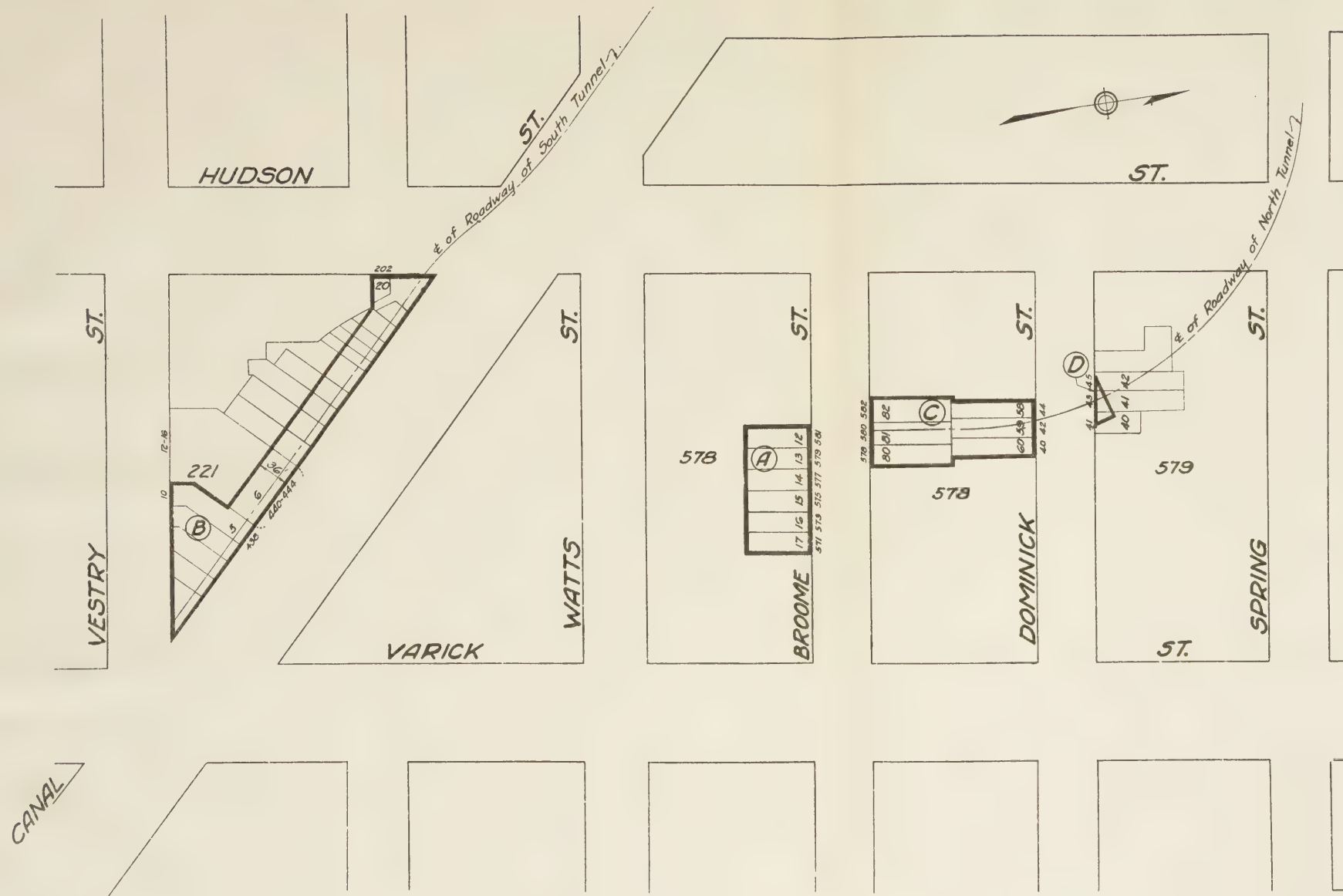
Chas. H. ...
ENGINEER OF DESIGNS

ARL

DRAWN BY ...
CHECKED BY ...

W. B. ...
CHIEF ENGINEER

FILE NO. I-5A



LEGEND:

- (A) Denotes area available for Contractor's use.
- (B) (C) (D) Denote areas available for Contractor's use and location of tunnel structures.

NOTES:

221 Denotes Block Numbers
 12 " Lot "
 500 " Street "
 Buildings on areas available for Contractor's use, and on areas available for Contractor's use and location of tunnel structures are to be razed by the Contractor.

For Alinement and Profile
 see Drawing No. 1, File No. 1-5A.

AREA AVAILABLE FOR CONTRACTOR'S USE

Chas. H. H. H.
 ENGINEER OF DESIGN

NEW YORK STATE
 BRIDGE & TUNNEL COMMISSION
 AND
 NEW JERSEY INTERSTATE
 BRIDGE & TUNNEL COMMISSION
 HUDSON RIVER VEHICULAR TUNNEL
 CONTRACT No. 5A
 CONTRACT DRAWING No. 17

SCALE 0 20 40 60 FEET

DATE: SEPTEMBER 6, 1924

DRAWN BY G. E. B. C.
 CHECKED BY J. E. B.

Chas. H. H. H.
 CHIEF ENGINEER

FILE NO. 1-5A

UNIVERSITY OF ILLINOIS-URBANA



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